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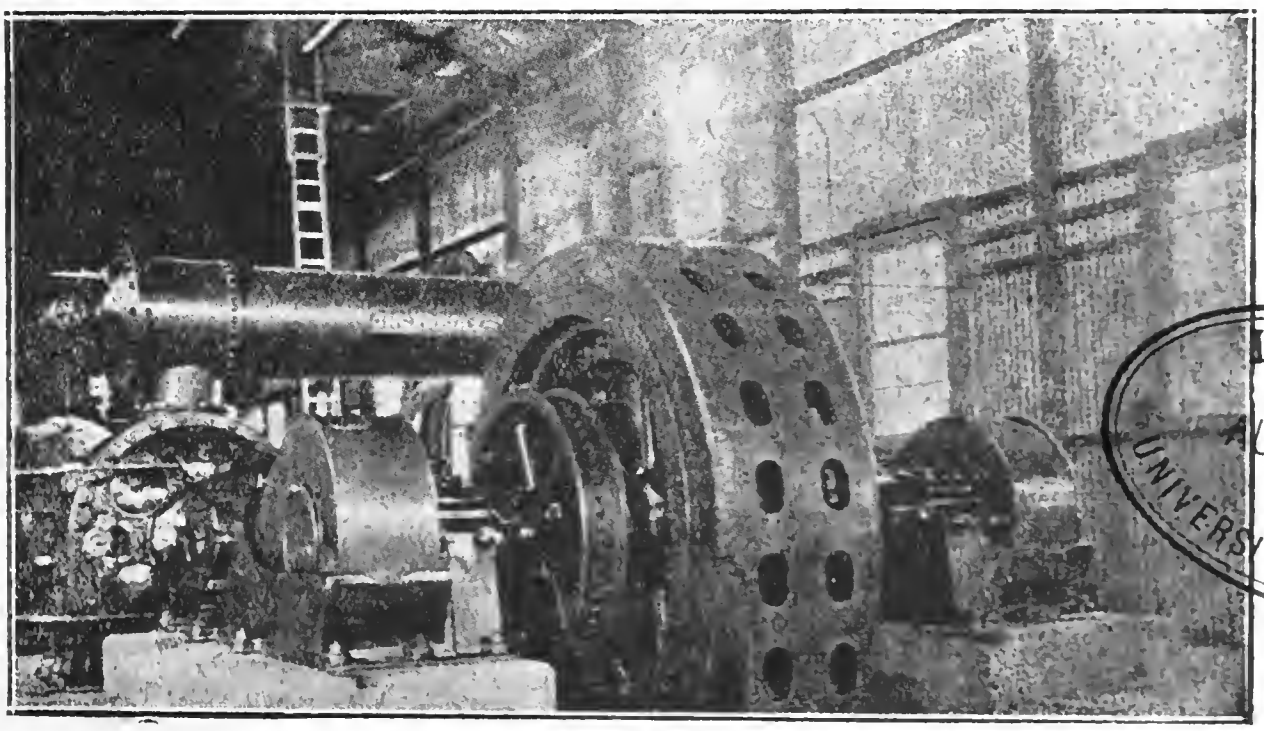

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Notes and News

A Government Labour Exchange.

It is understood that an agreement has been arrived at between the Government, the Chamber of Mines, and the Trade Unions, whereby a central labour exchange for the whole Rand will be administered by the Government. This will meet the objections of the employers to an exchange controlled by the Unions and of the men to a bureau run by the mines. Both employers and employed now recognise that such an organisation can best be run by the Government, and the present White Labour Bureau will therefore be extended to deal with the whole Rand. All concerned are to be congratulated on the successful issue of the negotiations in regard to this question.

* * * *

The Journal of Industries.

We have received a copy of the first issue of the South African *Journal of Industries*, issued by the Department of Mines and Industries. The production has apparently been delayed by the necessity for translating the contents into Dutch. Despite this drawback, the first issue is, for a Government publication, commendably prompt, and contains a number of interesting and informative articles on subjects related to industrial development. The Secretary for Mines and Industries, Mr. Warington Smyth, contributes a valuable article on "The Beginnings of Organisation for Industrial Expansion." We hope to refer again to this and other articles; and in the meantime offer our congratulations to the Acting Editor, Mr. Canham, and the Department of Mines and Industries on its successful debut in monthly journalism.

* * * *

T.C.M.E. Dividend.

A dividend of 5 per cent. (1s. per share), free of South African income tax, has been declared by the Board of the T.C.M.E. for the period ending 30th September, 1917. Dividends despatched from the London office to persons resident in the United Kingdom will be subject to the deduction of English income tax.

* * * *

Andrada.

An interesting account of the dredging plant used by the Andrada Mines, Ltd., on the Revue River appears in the *Beira News* of last week. The Andrada dredge has proved a conspicuous success. It is 110 feet in length with an endless chain of 71 buckets, each of 1,700 lbs. weight and with a capacity of 7½ cubic feet of gravel. It handles an average of about 80,000 cubic metres of material per month; the average value per cubic metre is about 1s. At the present rate of working the life of the Andrada is estimated at about fifteen years.

* * * *

Vaal River Diggers' Union.

The report submitted by the General Secretary of the Vaal River Diggers' Union at the twelfth congress, which met at Barkly West on the 26th inst., states, *inter alia*:—Since last congress the ground at Elandsdrift, under Proclamation of August, 1915, has been worked, and turned out generally payable; this year, however, owing to the river coming down so early, the large breakwater constructed there was washed away, causing a loss of some £1,100. The union sent representatives to the opening of new fields at Aliwal North in February this year to watch the interests of the diggers generally; unfortunately, the great expectations founded on the early finds were completely disappointed. From Douglas a petition presented to Government in July, asking them to throw open Buckland Island was unsuccessful. Hopes are still entertained that at some future date the Lands Department will see their way to withdraw their opposition, as diamonds of some

value have been found there. Quite recently the Acting Inspector of Claims went down to Middledrift and declared available for diggers a small portion of ground on Farm R. 24 which had been in dispute for some time.

* * * *

The Bawdwin Mines.

In describing the excellent position and prospects of the Bawdwin Mines last week we stated:—"It is only eleven years since they were acquired by the present control, and already there has been proved to exist down to the sixth level over 3¾ million tons of ore, containing nearly 10 million ounces of silver, more than a million tons of lead, three-quarters of a million tons of zinc, and a few thousand tons of copper." Instead of 10 million ounces of silver, the foregoing should have read 100 million ounces, which, of course, makes all the difference.

* * * *

Frank Smith Prospects.

Several enquiries have lately been received regarding the prospects of the Frank Smith Diamond Estates and Exploration Co., Ltd. They are answered in the following quotation from the chairman's speech at the annual meeting a couple of years ago: "As far as their mineral possibilities are concerned, our general manager, in a supplementary report, which he made to us in September, states that he looked upon the mineral possibilities of the company's farms as a very valuable asset. On one farm, he said, he had exposed a diamondiferous fissure of most promising appearance, and on several other of the company's farms there are good indications which he considers should be followed up. The work done during the year has certainly confirmed one fact—namely, that the Frank Smith is a true diamond pipe. We have found that as we get deeper the mine becomes cleaner and contains fewer intrusions, and although we have been extremely unfortunate in being stopped by the war just when we began to get on our feet, I think the figures which we have been able to submit in our report undoubtedly indicate that, when work is resumed and the diamond market again becomes normal, the mine can be worked at a profit."

* * * *

August Mineral Returns.

August registered a record coal output, the total for the Union being 944,757 tons, valued at £294,877, an increase on July of 69,877 tons and in money £19,986. The Transvaal contributed 618,314 tons, representing £147,404, an increase of 53,290 tons; the Free State 76,833 tons valued at £19,780, an increase of 3,500 tons; Natal 248,729 tons valued at £127,022, an increase of 12,989 tons; and the Cape 881 tons valued at £671, an increase of 98 tons. Sales and shipments of copper from the Transvaal and Cape amounted to 592 tons, valued at £29,327, and of tin 225 tons valued at £34,777. The Labour return shows that 31,494 whites and 261,196 coloureds were engaged in mining throughout the Union in August, the former a decrease of 114 and the latter of 3,216.

* * * *

British Post-War Trade.

The War Cabinet has sanctioned the new scheme for commercial intelligence to assist in the promotion of British trade after the war, as recently cabled. The scheme provides for the creation of a large commercial intelligence department, with a wide expansion of the system of trade commissioners within the Empire and the strengthening and developing of commercial attache and consular services. The new department will eventually comprise the existing Department of Commercial Intelligence, the Board of Trade, and the Foreign Trade Department of the Foreign Office, and will be represented in Parliament by a Parliamentary Secretary. The appointment and control of trade commissioners will remain with the Board of Trade, and the appointment and control of commercial attachés to the Consular service with the Foreign Office, but the work of the new department will cover all matters dealing with commercial intelligence, and as far as necessary, arrangements to keep in close touch with the commercial classes of the United Kingdom.

* * * *

Special Joint Meeting of Scientific Societies.

A special joint meeting of members of the S.A. Institute of Engineers and of members of the Chemical, Metallurgical and Mining Society of South Africa, will be held in the Lecture Theatre of the School of Mines and Technology, Eloff Street, Johannesburg, this Saturday (29th September), at 8 p.m., when the following papers will be submitted and discussion invited thereon: (a) "Electric Furnace Manufacture of Shoes and Dies on the Witwatersrand," by Prof. G. H. Stanley, A.R.S.M. (Past-President, C.M. & M. Society); (b) "Description of an Electric Steel-Melting Furnace," by Prof. W. Buchanan, M.I.E.E. (Past-President, S.A.I.E.E.). The paper, which describes what is being done in the making of shoes and dies at the plant on the Robinson mine, will be illustrated with lantern slides. The councils of both societies trust there will be a large attendance, not only of members, but also of their friends.

* * * *

Chamber of Mines' Quarterly Meeting.

The feature of the address from the Chair at the quarterly meeting of the Chamber of Mines this week was the reference to the danger of the low grade mines closing down. The President said that although the output had been well maintained, it was nevertheless indisputable that the lowest grade section—which is probably about 25 per cent.—was having the greatest struggle for the continuance of its existence that had ever been experienced. The industry having been favoured with a reasonably good supply of native labour, the low-grade mines had during the war period been able to survive the burden of heavy additions to the costs. They had staggered, but they had survived, and the net result of the position had been that the addition to the working costs of over three millions sterling spent by the industry had contributed to the vastly-increased prosperity of the community. Dividends had been decreased, or in some cases were non-existent, but although low-grade mines had survived the burden, with an adequate native labour force, they could not survive if the present acute shortage in that respect was not appreciably improved upon; in other words, the combined handicap of higher costs attributable to the war conditions and the inadequate native labour force was one which they could not bear. The number of natives employed in August was 24,000 less thon a year ago. There was a slight indication that the tide had turned, and the President indicated that the position would slowly improve. Mr. Dale Lace made a spirited protest against the procrastination of the Government in regard to the East Rand Mining Leases Bill. A full report of the meeting will be found elsewhere in this issue.

* * * *

Mode of Occurrence of Gold in Quartz.

In the report of the executive committee of the Advisory Council of Science and Industry, issued in Melbourne last month, it is stated that, as the result of an interview with Professor E. W. Skeats, Professor of Geology in Melbourne University, the executive decided to appoint a special committee to investigate the mode of occurrence of gold in quartz in Australia, with a view to determining the principles which have led to the localisation of payable gold, and thus, among other things, cheapen the cost of deep prospecting. It was decided to commence operations by the study of the Bendigo Goldfield, and Dr. F. L. Stillwell was appointed secretary and salaried officer of the committee to devote his whole time to the work. Dr. Stillwell commenced work on 2nd August, 1916, and has visited nearly all the active mines on the field, making altogether 118 inspections. He has also carried out a large amount of microscopical work and consultation of literature in relation to the work. Members of the special committee have also visited Bendigo three times during the year and together inspected eight mines. The tentative conclusions at present reached as to the

origin of the gold deposits indicate the possibility of yielding some assistance to prospecting in the future. At a subsequent meeting of the executive committee it was decided to reappoint, for another year, the special committee dealing with this matter, and Dr. Stillwell's appointment was extended for a like period.

* * * *

The Late Mr. Adair.

The death occurred last week of Mr. Alfred Adair, the well-known chemist and metallurgist, who up to a few weeks ago was a contributor to our columns. The late Mr. Adair was born in Whitehaven, Cumberland, 53 years ago. He was educated at Owen's College, Manchester; the Royal School of Mines, London; and at Heidelberg and Berlin Universities, under Bunsen, and Hoffman of aniline dye fame. He was chemist at the Seaton-Carew Ironworks near Middlesborough, and was also for a time at Nobel's Works in Scotland. He also had experience at the Cyanide Manufacturing Works in Paris. For two years he was manager of the Great Britain G.M. Co. He was the originator of the Adair-Cruickshanks patent, taken out in 1899, in reference to fine grinding. The soundness of his views on this point was, however, confirmed in later years by the general adoption of the tube mill. Later he came into prominence in connection with the Adair-Usher patent for dealing with slimes. The late Mr. Adair was a man of high scientific attainments and great originality of mind, and his passing is a distinct loss to the community.

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Rhodesia Copper.

The Rhodesia Copper Company, despite its name, is not mining on its own account, although it owns mining rights, but is at present carrying on the business of a general exploration and finance company. The interest from investments, etc., during the twelve months ended May 31 last was £8,110, compared with £7,943 in the preceding year. Sales of land were made on a limited scale only, but they produced a profit of £2,128 in contrast with £1,499. The issued capital of the company in shares of 4s. 6d. each is £264,016, and the assets valued in the market or by the directors at May 31 exceed the total issued capital by about £6,000. The securities have undergone considerable variation, but for the better, as the investments included £73,900 in high-class securities against £26,900. Quoted shares and debentures have a market value of about £18,000 less at £56,354, while the estimated value of unquoted shares, etc., is £19,000 down at £100,149. The company's land, consisting of about 474,000 acres, stands in the books at £51,269. The dividend is reduced from 1½d. to 1d. per share, and a balance of £1,696 is carried forward as against £5,990 brought in.

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S.W.A. Concession Companies.

In an article on South-West Africa, Mr. D. Drew, M.L.A., gives the following particulars, drawn up from official sources, which gives the name of each company holding land or mineral rights in the late German Protectorate, its head-office, date when formed, amount of capital, district and area. The last is given in hectares, each of which represents 2½ English acres:—Deutsche Coloniale Gezellschaft, Berlin, 25/8/83, £200,000, Orange River to Omaruru, two-fifths of the Protectorate, 23,224,000 hectares; Kaoko Land and Mining Co., London, 12/8/93, £500,000, Outjo, 9,982,000 hectares; South-West Africa Co., Ltd., London, '92 and '93, £2,000,000, Outjo and Grootfontein, 12,949,000 hectares; Otavi Mine and Railway Co., Berlin, 12/9/92, £1,000,000, Grootfontein, Omaruru, Swakopmund, Karibib, 1,500,000 hectares; Hanseatic Mining Co., Berlin, 11/8/93, £50,000, Rehoboth 1,844,272 hectares, Gobabis 1,758,475 hectares; S.A. Territories, Ltd., London, 19/5/93,* £500,000, Hasuur, Keetmanshoop, 6,221,000 hectares.

* Date when recognised by Germany. There were previous treaties with various native tribes, Bondelzwarts, Veldschoondragers, etc.

TOPICS OF THE WEEK.

THE COMING OF AMERICAN CAPITAL.

The question of when and [illegible] millions of money estimated by Mr. Rhodes develop the Far East Rand, has [illegible] the announcement of the advent [illegible] house this week. Details of the [illegible] found elsewhere in this issue, and [illegible] scribed as one of the best angaries [illegible] It may be remembered that in referring to the [illegible] of American financiers with the Rand *The Times* some ago described it as the inevitable outcome and natural result of the "impossibility of raising money in Great Britain," and opined that South Africa would welcome American participation, "because it supplants the German financier." In this last connection the *African World* said: "We believe that scrupulous care has been taken in the negotiations which have resulted as above to ensure, as regards the members of the syndicate, that the money to be put up is not German money, or German-American money." Another London paper said that while it was "to be hoped that no spirit of jealousy or "dog in the manger" policy would be displayed by the other Kaffir houses in opposition to the scheme for bringing American capital to the Rand, some of the London papers had allowed their enthusiasm over the new departure to carry them rather too far. It recalled that to bring the Government Areas' big property to the producing stage no less than £1,960,000 of British capital had been spent since the company's flotation in 1910. Even since the war the Consolidated Mines Selection Company and its friends raised some £600,000 in connection with the Springs and Daggafontein deals, and obtained the guarantee for whatever more was wanted. The fact is that more capital is now required, and, whether the source be London or New York, the Rand will welcome the capital necessary to develop the Far Eastern basin. No less an authority than Mr. F. W. Hirsh, the editor of the *Economist*, in a recent lecture at the London School of Economics, declared that after the war the Colonies would have to provide themselves with most of the capital required for their development. Though, as some figures last year compiled by the Chamber of Mines showed, South African investors are in an increasing degree acquiring the cream of Rand dividend-paying stocks, the day when this country can satisfy the demand for fresh capital for the extension of the gold mining industry seems still far distant. Outside capital must continue to be interested in the development of our industrial resources; and the only question is to what extent the United States will supply that capital and so fulfil the roseate expectations now aroused. Commenting on a statement issued by the National City Bank of New York, the *Statist* remarks that foreign countries "in all quarters of the globe are sending money to the United States for safe custody and for business purposes. It is believed that Germany has sold a large quantity of American securities in the United States in the past three years, and it is known that Great Britain and France have also sold substantial amounts." Then we have the opinion of no less an authority than Mr. G. E. Roberts, formerly Director of the United States Mint, who, in a recent address, declared that "there can be no general revival of trade in the countries where we hope for it most; no large opportunities unless we take the place of Great Britain and Germany in providing capital for development purposes." Leaving Germany out, it is assuredly true that the cessation of the stream of British capital has thrown the economic balance out of gear. In another part of this issue we reprint an interesting account of the aims and objects of the International Industrial Corporation that was formed last year with a capital of £10,000,000 to engage in such enterprise as the new Anglo-American Corporation of South Africa contemplates. The new Anglo-American house has the heartiest of welcomes to South Africa. Its success will ensure the coming of the further overseas capital necessary to the development of the great dormant mineral resources of the Far East Rand and of the country generally.

THE ANGLO-AMERICAN CORPORATION OF SOUTH AFRICA.

The Registrar of Companies at Pretoria recorded this week the registration under the Transvaal Companies Act of the "Anglo-American Corporation of South Africa, Limited," with an issued capital of £1,000,000, in 1,000,000 shares of £1 each, all of which have been subscribed for at par, there being no vendors', promoters' or founders' shares. Further, the articles of association provide for the increase of the capital to £2,000,000, and also for borrowing powers to the extent of twice the amount of the issued capital. The immediate object of the corporation is to participate in tendering for the leases of the Far East Rand mining areas now advertised by the Government; but the memorandum of association filed in Pretoria shows that, in addition to the usual mining and financial provisions, the corporation is empowered to underwrite Government loans, support existing industries, promote the establishment of new industrial undertakings, exploit inventions. and make contracts for the construction of public works such as irrigations, reservoirs, docks, harbours, etc.

The Directorate.

The list of directors is as follows:—

Mr. Ernest Oppenheimer, of Kimberley and Johannesburg, who was Mayor of Kimberley from 1912 to 1914;

Mr. William Lincoln Honnold, of New York, who for many years occupied the position of consulting engineer to the Consolidated Mines Selection Company, and was subsequently the managing director of that house in South Africa;

The Hon. Hugh Crawford, chairman of the National Bank of South Africa, Ltd.;

The Hon. H. C. Hull, late Minister of Finance to the Union Government;

Mr. Charles Hazlton Sabin, of New York, the well-known American banker, and president of the Guaranty Trust Company of New York;

Mr. William Boyce Thompson, of New York, one of the leading American mining men.

Messrs. Hudson and Friel have been appointed solicitors, and the National Bank of South Africa, Ltd., who have acted throughout on behalf of the American directors, have been appointed bankers to the corporation in South Africa.

Mr. Ernest Oppenheimer and Mr. W. L. Honnold have been closely connected with the Consolidated Mines Selection Company; but it is stated that neither that company nor any other South African mining house is in any way financially interested in the corporation, and that the whole of its capital is new money for South Africa.

It is understood that Mr. Ernest Oppenheimer has been appointed chairman of the corporation, and that he and Mr. W. L. Honnold will be permanent directors. Mr. W. B. Thompson and strong associates are behind the new corporation. The new flotation is dealt with in our leading columns.

IRON PRODUCTION: LESSONS FROM OTHER DOMINIONS.

In making a beginning with iron and steel making from local ores, South Africa can learn from the example of the other Dominions. Thus, the Queensland Public Works Commission has been lately taking evidence in Brisbane in connection with the proposed establishment of State iron and steel works in that State. On the 8th August, the first witness examined was the Minister for Mines (Hon. A. J. Jones, M.L.C.), who made the following statement:—

Speaking as a private individual, I am of opinion that the great war we are engaged in is teaching us many lessons. The chief lessons we in Australia are being taught is that the time has arrived when we shall give greater encouragement to the establishment of our secondary industries, and that we shall develop our natural resources. Speaking as Minister for Mines, I am firmly of opinion that we should establish the iron and steel industry in Queensland. In my opinion not only would it be profitable to the State, but it would find employment for many. For many reasons now is an opportune time to begin. Firstly, the iron used for casting is becoming very scarce in Australia, causing the price to soar very high; and, secondly, an industry would be established which would find employment for many of our returned soldiers, numbers of whom will not desire to go on the land. The proposal of the Government to embark in this great iron and steel industry has met with a mixed reception; and, while I am aware of certain Press criticisms, I am prompted to say that the history of all discoveries of a revolutionary character is somewhat similar. All previous failures are remembered, and we are advised to be wary. Still, on the whole the consensus of public opinion and of Press criticism is very strongly in favour of Government action. We have received many encouraging letters containing valuable information, and we have many offers of assistance, for which I may, on behalf of the Government, here express our kind appreciation. Reverting to the price of pig-iron, the pre-war price (year 1914) to the Ipswich Workshops was: Lithgow, £4 16s. 6d. per ton; Beever (China), £4 11s. per ton; Eglington (England), £6 18s. 3d. per ton. The 1917 price (contract) with the Ipswich shops—Broken Hill Proprietary Company, Newcastle, £8 per ton. The price, I am informed, has now reached £11 and £12 per ton. I am also advised by a very reliable authority that advices from Great Britain are to the effect that there will be little hope of getting pig-iron from there at a reasonable price until at least six years after the termination of the war. . . . . A blast furnace with a capacity for treating or producing 50 tons of iron per day could be erected at a cost not exceeding £1,500. This, in my opinion, should be the next step. At the present price of pig-iron such an enterprise would be profitable to the State, and further experiments in the manufacture of iron from deposits other than Biggenden could be profitably engaged in, because in the establishment of an industry it would be idle to depend on the Biggenden deposits, which, after all, are small compared with the quantity required. In establishing large works, the question of the assemblage of the materials required for producing iron and steel is an all-important one; but a fact worthy of mention is that we have all the materials necessary in this State, whereas the Broken Hill Proprietary Company, Newcastle, New South Wales, draw some of their supplies from States other than New South Wales. The iron ore is obtained from Iron Knob, South Australia; it is railed 35 miles and carried by water to Newcastle. For the manufacture of steel, manganese is used, and that company is now coming to Queensland for that material. Queensland abounds in the material required for the establishment of this all-important industry. Our known iron deposits may not be as large as that of Iron Knob in South Australia, but we have many deposits, and their magnitude has yet to be determined. One other matter I would like to mention, and that is in my opinion we are more likely to experience difficulty in getting sufficient coke supplies, but I am hopeful we can establish a State coal mine having coal of coking quality, and if modern by-product ovens are erected we could produce coke profitably and in sufficient quantity to meet our requirements. Under the present method of producing coke in the old beehive oven, the only kind used in this State, a great waste takes place. For instance, under the modern system, one ton of coal produces 75 per cent. coke, 7½ gallons of tar, and 28 lbs. of ammonia, independent of the gas power that can be generated to operate all necessary machinery. Under the beehive system of producing coke, the percentage is not so high, while the ash percentage is higher, and that is detrimental to smelting; all the other products are wasted. I am hopeful that the industry will be firmly established in Queensland, and that in the very near future we shall be turning out at least 50 tons of pig-iron daily.

Appointment of District Locomotive Superintendent.

THE BEIRA & MASHONALAND & RHODESIA RAILWAYS invite applications for the position of District Locomotive Superintendent. Commencing salary £600 per annum, with usual staff privileges. Candidates who must be conversant with modern locomotive practice and have had good drawing office experience are requested to forward their applications (giving full particulars of training, age, and stating whether married or single) not later than the 20th October, 1917, to—

The Locomotive Superintendent,
Umtali, Rhodesia.

AMERICAN CAPITAL FOR SOUTH AFRICA.

Authoritative Account of Its Aims and Policy.

THE largest and most influential manufacturing, railroad, mining, and engineering corporations of the U.S.A. have combined with the big banking institutions for the purpose of interesting American capital in foreign countries. Believing that the world would be interested in learning about the plans of the organisation, the *Engineering Magazine* interviewed the officials of the new American International Corporation—of which Mr. C. H. Sabin, a director of the Anglo-American Corporation of S.A., is a member—and obtained the following authoritative outline of its field of activities, which, it will be noted, extend to South Africa:—

The opportunity long searched for by the engineering industries of the United States to extend their enterprises into foreign countries and to build up abroad steady markets for their products under conditions of trade reasonably free from annoyances and uncertainties is at hand. Through the organisation last November of the American International Corporation, there has been brought about an instrumentality of commerce which is scientifically designed and financially equipped not only to stimulate engineering enterprises in foreign lands but to create through them a steady and easy-flowing market for American engineering products. In magnitude and carefulness of design the new corporation exceeds any other organised effort in commercial history to co-ordinate the forces of foreign demand and domestic supply. What the East India Company was to the development of Great Britain's Asiatic commerce, and what the Hudson Bay Company was to the development of Canada, conveys only a partial idea of what the American International Corporation is purposed to be to the industrial and commercial development of the U.S.A. Both in scope of organisation and in the support is commands from the leading financial and industrial interests of the country the new corporation stands unique. It is essentially a co-operative enterprise; for it enters upon its world-wide work not as a grasping competitor, but as a benevolent helper of commerce and industry, inviting the co-operation and support of business men through out the world. It is organised under the laws of New York State with a capital of 50,000,000 dollars, and with a charter that is so broad as to enable it, if need arises, to carry on almost any kind of business enterprise and to acquire almost any kind of property. The chairman of its board of directors is Mr. Frank A. Vanderlip, President of the National City Bank of New York City, with which the new corporation is closely affiliated. Its President is Mr. Charles A. Stone, head of the firm of Stone & Webster, of Boston, well known as engineers and managers of public utilities. Mr. Stone himself is one of the foremost business men of the U.S.A., and has won the reputation of being a "vitaliser" of business, more than fifty public service corporations having been organised under his firm's direction. Mr. Willard D. Straight, formerly an official representative of the United States Government in China, and recently connected with J. P. Morgan & Co., is vice-president of the new organisation. Mr. R. P. Tinsley, formerly treasurer of the Standard Oil Company, and intimately connected with its foreign trade for many years, is the secretary and treasurer. Its board of directors includes the following: Messrs. J. Ogden Armour, of Armour & Co.; Charles A. Coffin, of the General Electric Company; William E. Corey, Midvale Steel and Ordnance Company; Joseph P. Grace, W. R. Grace & Co.; James J. Hill, the Great Northern Railway Company; Otto H. Kahn, Kuhn, Loeb & Co.; Robert S. Lovett, the Union Pacific Railroad Company; Ambrose Monell, the International Nickel Company; Henry S. Pritchett, director of the Carnegie Foundation; Percy A. Rockefeller, the Standard Oil Company; John D. Ryan, the Anaconda Copper Company; Charles H. Sabin, the Guaranty Trust Company; William L. Saunders, the Ingersoll-Rand Company; James A. Stillman, the National City Bank; Theodore N. Vail, president of the American Telegraph and Telephone Co.; Edwin S. Webster, of Stone & Webster; Albert H. Wiggin, the Chase National Bank; Beekman Winthrop, Robert Winthrop & Co.

The engineering interests cannot fail to recognise the vital significance which this new organisation holds to them. Naturally, the question must arise what will be the relationship between the two? Will it be one of competition or of co-operation? It is necessary, therefore, in the first place, to review the conditions of the world's commerce and industry which called the American International Corporation into existence.

The engineering profession in America is, for the most part, well acquainted with the difficulties and problems that attend the launching of a new industrial enterprise in a foreign country, in South America, for example, or in the Orient, how difficult it is to obtain capital for the enterprise in the first place, how next to impossible it is for an American interest to get adequate banking facilities; the lack of adequate means of transportation; the difficulty of ascertaining the exact value of the property; the lack of a steady market for American products needed for the enterprise; and, finally, the difficulty of keeping up the interest. Speaking about this phase of the work of the new company, Mr. Stone, its president, said: "We are far behind the English in building up foreign trade through association with foreign people and study of their ways. The English have their young men scattered the world over. Ours have stayed at home, or, when they have ventured forth, have not had the time nor the disposition for intensive study of the customs, manners and business of foreign people. The field is the whole wide world. We have hardly begun to do business and our office staff is not even organised, yet we have proposals before us for investment in Central America, South America, China and South Africa. Every one of these propositions implies the employment of Americans and the purchase of American goods."

The story of the mining enterprise prominingly launched in Latin America only to be abandoned some months later for lack of capital is familiar to American engineers. There are only too many instances of it. Another story just as familiar is that of the enterprise regretfully abandoned because the original valuation was not an accurate one. On the other hand, we have seen the difficulties encountered by the American manufacturer of engineering products who tries to open up a market in South Africa. The American agent does not understand the customs, often does not understand even the language of the country into which he seeks to thrust his goods. He finds a credit system impossible because there are no American banks to handle it for him; most important of all, perhaps, the American agent must report home that an extensive market is out of the question because the shipping facilities are not sufficient to maintain it. All these difficulties existed prior to the outbreak of the European War, but since then there has come about a new condition which has made all the former troubles seem of slight importance. The great and pressing problem in the field for foreign trade and foreign industry to-day is the problem of where to get the capital. Prior to the war, Europe was the chief source of liquid capital for foreign enterprises. Germany financed the coffee crops of Central and South America. English syndicates financed the railways and a great part of the mining enterprises. British and German capital financed the public utilities projects. Great Britain's liquid capital financed railway enterprises in the Orient. The number of instances might be multiplied indefinitely, but the condition was one that the American banker and the enterprising American engineer well knew—capital came from abroad.

Now, the war has created a condition that might be described as a famine of capital. All the former sources of it are closed and are likely to remain dry for a long time because of the heavy financial burden which the peoples of the warring countries must bear in the shape of increased taxation and increased cost of living; the pockets from which formerly came the money to finance the enterprises in Europe, in Asia, in Africa, in South America, are now empty. The result is that many going concerns in many different parts of the world are seriously in need of capital to continue the enterprise. Where shall they look for it? Europe, busy with her exhausting war, must give to it her entire resources. The savings of the thrifty peoples of France, Germany, England—for we must admit to our shame that they are more careful of their earnings than the Americans are—have been sucked up in war bonds or in meeting a higher scale of living due to the war. In either event that money is gone for many years from the field of industrial investment. On the other hand, many Europeans have been forced to liquidate their valuable holdings in enterprises in South America and Asia in order to get ready cash. The result is that these enterprises, essentially sound, have been abandoned and now lie idle awaiting the magic touch of new capital to spring into new life. Out of this condition arises the great opportunity which has caused the creation of the American International Corporation. It is to bring new capital and, therefore, new life into these languishing industries. It is an opportunity that lies at America's door with an imperative call for response, the opportunity of a nation's lifetime, a summons to international service

MINING EXAMINATIONS.

Study for Certificates as Mine Captains, Mine Managers, Surveyors, Mechanical and Electrical Engineers, and Engine Drivers. Private Tuition and Correspondence Lessons, where personal tuition is impracticable. Practical Mathematics and Electrotechnics. E. J. MOYNIHAN, Consulting Engineer, Cuthbert's Buildings, corner of Eloff and Pritchard Streets, Johannesburg, P.O. Box 2061.

WANTED.

A Practical Mining Man with £2,000 cash to buy one-third share in a Mynpacht.

Quartz Reefs. 10-stamp Battery.

The money is required to develop the property.

Further particulars from—

E. TAMSEN,
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Transvaal.

that has the aspect of destiny. This does not mean, however, that the American International Corporation is also to seize upon the industries which it seeks to resuscitate, in other words to take advantage of a period of depression to enter upon a career of commercial rapacity. The position of the corporation is one that should be carefully understood. Its essential purpose is not that of acquisition but of resuscitation and co-operation. It seeks, as a newspaper recently put it, "to heal the war wounds of Europe," but not to take Europe's property away from it. Some apprehension may perhaps have been created among American engineering organisations which have foreign enterprises afoot by the first announcements of the incorporation of the American International Corporation in the newspapers. Some glowing terms were used, truthful in substance, perhaps, but not quite accurate. The mission of the corporation was unfortunately described by one writer as "an industrial conquest throughout the world." Nothing could be less exact. The purpose is not to conquer, but to co-operate.

Underlying the work of the American International Corporation is the greatest hope that it will create lasting good feeling toward America and American business in foreign countries. Now, if a campaign of seizure and exploitation were planned, that would be the surest way to create not good feeling but very bad feeling, and the corporation would defeat its own ends. An excellent synopsis of the corporation's objects was given by Mr. Stone at the time of its incorporation. Attention should be directed especially to the emphasis which he placed on the idea of rehabilitation. He said: "It is organised for the purpose of doing an international business; to promote those trade relations with the different countries which will help to make a market for our American products; to finance the promoting of great public and private undertakings in foreign countries by American engineers and manufacturers; to assist in financing the rehabilitation of industries in foreign countries; to undertake such domestic business as seems advantageous in connection therewith." In short, the purpose is to stimulate growth and not to acquire. Although the broad charter of the corporation enables it to hold properties, it will not do so except in emergency cases in which acquisition is necessary either to save the property from going to ruin or to keep open a means of communication. American engineers and manufacturers, therefore, should not labour under the misapprehension that the corporation would ever seek to crowd them out of a field where they had already put an enterprise under way. On the contrary, the corporation would be ready to co-operate, if called upon to do so, in the financing of the enterprise. Let us take a mining enterprise in South America as an example. As the result of the withdrawal of European capital by the war the promoters find themselves unable to continue the development. The properties are of the highest order, but the money is lacking. The enterprise is brought to the attention of the American International Corporation. What would its policy be? First, to ascertain that the enterprise was really sound. The corporation will be admirably equipped for that, because the work of determining the value of properties will be under the immediate direction of Mr. Stone, whose watchword is efficiency and economy, and who has had the very widest experience in placing enterprises on a sound financial basis. Having ascertained that the property is sound and offers a profitable field for investment, the next step of the corporation would be to finance it, either through a reorganisation of the company in co-operation with those interests already in charge of the properties or through an entirely new corporation formed for the purpose. Should the conditions be such that there seemed no other way to save the enterprise except to buy it outright, the American International Corporation would do that; but in that event it would hold the property only until another organisation had been provided for the continuance of the enterprise. The instance just cited might be an emergency case in which quick decisive action would be necessary at a critical moment. We had such an instance in the case of the corporation's recent purchase of the entire remaining fleet of the Pacific Mail Steamship Company, consisting of seven vessels operating between the Pacific Coast of the United States and the West Coast of Central America.

The attitude of the American International Corporation toward all industrial enterprises in foreign countries will be one of friendly sympathy and co-operation, being ready at all times to furnish encouragement, information, banking facilities, communication, transportation and capital wherever they are shown to be needed. In such a way it hopes to create a spontaneous demand abroad for American-made products and to open up and keep open the avenues of trade through which those goods may freely flow. The Government's attitude toward this new enterprise has so far been one of friendly interest. The Bureau of Foreign and Domestic Commerce of the Department of Commerce has shown an active interest, and the Federal Trade Commission is entirely in line with the progressive idea advanced by the inauguration of the corporation.

PERSONAL.

The Secretary for Mines is attending the annual conference of the Vaal River Diggers' Union.

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Mr. P. K. Horner, General Manager of the Union Minière, left this week on his return to the Congo.

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Mr. F. R. Lynch, of the Consolidated Mines Selection, is leaving this week on a month's well-deserved holiday.

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Mr. W. S. Saunders, who has been connected with the Consolidated Mines Selection Company for many years in secretarial capacities, has been appointed sub-manager of the company in South Africa.

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Mr. W. Moses, lately Inspector of Mines, has accepted the position of Technical Adviser to the Natal Coalowners' Association, and will take up his residence at Durban. Mr. Moses will have the good wishes of his many Rand friends in his new undertaking.

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Mr. W. B. Thompson, one of the directors of the new Anglo-American Corporation of S.A., Ltd., is associated with Rockefeller and Guggenheim copper enterprises. He is President of the Inspiration Consolidated Copper Company and the Utah Copper and Nevada Consolidated Copper Company.

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At Kimberley last week the death occurred of Mr. C. E. Nind, a director of De Beers Consolidated Mines, Ltd., and many other diamond, gold and coal mining companies. The funeral took place on Sunday amid widespread manifestations of sympathy. The late Mr. Nind's long and honourable connection with the chief industry of the diamond fields, and his associations with the public life of the city were of such a nature as to assure of a very representative gathering at the funeral.

ANSWERS TO CORRESPONDENTS.

All enquiries addressed to the Editor must bear the writer's name and full address. We cannot reply to enquiries by letter, but telegrams with replies prepaid will be answered. Correspondents are requested to write their names and pseudonyms distinctly.

"Investor" (Germiston).—You and your friends would be well advised to leave the venture alone.

"Shareholder."—There is nothing wrong with the mine, as far as we can learn. Selling seems to be due to people withdrawing money for Far East Rand speculations.

"Anxious."—The water trouble was not serious, and has now been overcome.

"F. S."—Your query is fully answered in another part of this issue.

"F. J. T."—Everything depends on development, and it is too soon to appraise the trend or value of that.

SURVEYOR WANTED.

Wanted.—A Certificated Surveyor. Must be exempt from military service.

Apply, giving copies of testimonials, to—
Box 1, WITBANK.

SUNDAYS RIVER SETTLEMENTS.

FOR SALE at par 600 £1 Shares in the above Irrigation Scheme. Owner leaving South Africa. Should be worth double within two years. Apply in the first place to—

A. 51, Central News Agency, Johannesburg.

RAND WATER BOARD WORKING COSTS.

In an interesting report by the Chief Engineer of the Rand Water Board on the cost of water supplied by the Board since 1905 are shown the costs of water raised from the Board's various pumping stations since 1905. One table shows the annual cost in pounds and another shows the cost in pence per 1,000 gallons, and also the total annual expenditure. The total annual cost has been divided into the following sub-heads:—(a) Cost of pumping; (b) maintenance; (c) administration (Chief Engineer's only); (d) analysis and sterilization; (e) acceleration from Zwartkopjes; (f) temporary supplies from Oliphants Vlei and Doornfontein; (g) temporary water supplies. The quantity of potable water supplied during each year is also shown so that the effect of this factor can be gauged in comparison with the expenditure. Now although the quantity supplied affects the price per 1,000 gallons raised, it will be observed that considerable reductions have been made in the working costs. This can readily be seen by comparing the financial year 1913-14 with that of 1916-17. The total cost in the former being £89,837 and in the latter £80,271 or a reduction of £9,566, while the quantity supplied was 9·41 million gallons per day in 1913-14 as compared to 9·86 million gallons per day in 1916-17. This shows that the reduced annual expenditure in the latter year was obtained, although an additional 165 million gallons were supplied during that year. Table "B" shows that the total cost per 1,000 gallons sold fell from 12·15 pence in 1905-6 to 5·35 pence in 1916-17, while pumping fell from 6·26 pence to 3 pence during the same period. The highest maintenance cost was 2·79 pence per 1,000 gallons in 1909-10, as compared with 1·325 pence in 1916-17. Administrative costs also show a considerable reduction, but it would be unfair to compare the cost in 1905-6 with that of 1916-17. The reduction of expenditure has been due to several factors, amongst which are the following:—(1) Installation of mechanical stokers at the Village pumping station. (2) Installation of mechanical stokers at the Zwartkopjes central station. (3) Alterations and additions to the Zwartkopjes condensers. (4) Electrification of the Zwartkopjes pumping station. (5) Closing down of the Paarlshoop pumping station for considerable period each year. (6) Better intercommunication in the reticulation system. (7) More efficient organisation at the pumping stations, coupled with better personal supervision. (8) Closing down of the Braamfontein pumping station. (9) Selective pumping from the various shafts and boreholes, so as to pump the cheapest water. (10) Increased supply from the Zuurbekom area and direct pumping from Zuurbekom to the West Rand. (11) Slightly reduced cost of coal. (12) Increase in the quantity of water supplied to consumers. The reduction in cost has been obtained notwithstanding the following adverse factors:—(a) High cost of auxiliary supplies from Springs, Welgedacht and Daggafontein, and that from the Roodepoort reservoir and Springs. (b) Increase of pressures in the Germiston area and the Central and Central East Rand. (c) Increased cost of stores. (d) Betterment policy in regard to staff and workmen. (e) Increased wages bill due to war. To further reduce the annual cost, it is suggested that the electrification of the Paarlshoop pumping station be carried out after the war, as by doing so it will not be necessary to keep more than one white man and one boy at the station, whereas two white men and six boys are necessary under the present conditions. These men are required at the station, as we never know from day to day when the plant will have to recommence working. In conclusion, I desire to add that I am indebted to the Secretarial and Accountants' Departments for keeping the accounts in such a manner that it has been possible to keep in close touch with the working costs at the end of each month. Credit is also due to Mr. Mason and Mr. Collie, of the Engineering staff, and also to the Superintendents of the various stations for their efforts in helping to keep down the pumping and maintenance costs.

As an example of the class of work which might be done by a research department, Mr. Hildick Smith, in his address to the C.M. and M. Society, mentioned the question of the saving of nitro-glycerine which had been forced upon the industry owing to the war, and as a result of which it had been found that, by the use of explosives containing less nitro-glycerine, many mines were obtaining the same, or, in some cases, improved, efficiency in breaking ore. Another branch of work which could probably be undertaken by a research department, would be that of obtaining definite information as to the most economical class of stores and materials for use on the same kinds of work. Officials on the mines often had different ideas as to the best class of materials to use for a certain class of work. These ideas were often based on very indefinite data without allowance being made for the way such material was treated in its use. "As an example of what is being done in another direction through research work for the improvement of efficiency," he continued, "I would instance the work of the S.A. Institute of Medical Research through which the efficiency of the underground native labourers has been improved by the prevention of pneumonia. Another example of the use of research work, in this case for the prevention of miners' phthisis, is shown by the work done by the Chamber of Mines through its dust-sampling department as a result of which the underground conditions of the mines, in respect of the dangerous dust particles carried in suspension in the mine air, have been greatly improved. The work done by the British Government in the investigation of mining problems at their experimental station at Altofts and by the French Government at a similar station near Loos should be noted. In another direction, that of safety, we have the local Prevention of Accidents Committee running a 'Safety First' campaign which, although organised on different lines from that of a research department such as suggested, is doing good work. If for the safety of the mines a committee is necessary to improve matters in this respect—in addition to the Mining Regulations—is it not fair to assume that in order to obtain the maximum efficiency, an efficiency campaign is necessary, and, if so, this would best be carried out through the medium of a research department. It is assumed that the highest efficiency consequent with safety is always being aimed at on the mines; but in these days of high cost for stores and materials and an increase in other costs due to war, together with the multiplication of mining regulations a special effort for the attainment of the finer points of efficiency is more than ever essential. With regard to the Mining Regulations, although they are excellent in themselves, many of these regulations when strictly adhered to must unfortunately decrease efficiency and, therefore, require to be offset by the most efficient methods of working and time saving."

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Quite different from all other paints, supplied in any ordinary colour. Elastic, Waterproof, impervious to heat, cold and atmospheric conditions. A perfect preservative for Iron, Wood, Stone, &c. Salt water has no effect, is a postice cure for damp, resists the action of strong acids. Can be submerged under water, and in use withstands very high temperatures of superheated steam. Sole Manufacturers—

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New Jagersfontein Dividend.

The New Jagersfontein Mining and Exploration Company, Ltd., has declared an interim dividend of 4s. per share, payable to all shareholders registered in the books of the company on the 30th September, 1917. The dividend warrants will be issued to shareholders (other than enemy shareholders) as soon as possible after the 30th September, 1917.

New Vaal River Diamonds.

At the fifteenth annual general meeting of the New Vaal River Diamond and Exploration Company, Mr. J. van Praagh (presiding) said there was a profit on the year's working of £10,771, or a net profit of £9,000 to deal with. A dividend of 5 per cent. had been distributed. He expressed his belief that, owing to the exceptional quality of the stones found on the company's estate, the company would be the last to suffer by any depreciation and the first to benefit by any subsequent revival.

PROSPECTS OF THE UNION TIN MINES.

The following is an extract from a report made for the Union Tin Mines, Ltd., by Mr. Edward Cass, a base metal expert who has been engaged by Mr. W. A. Doherty as chairman of the Union Mica and Corundum Mines. Mr. Cass was lent by Mr. Doherty to the company. The former was engaged to come to South Africa for a similar purpose by the late Sir George Farrar, Bart. He was formerly chief field prospector to the Queensland Government and subsequently held important positions in different parts of the world, such as tin expert for the Great Northern Tin Mining Company, Queensland; manager, field operations, Tongah Harbour Tin Mining Company, Malay Straits, etc. In his preliminary report, dated 20th September, 1917, on the property of the Union Tin Mines (Roodewal, Olifant's River), Ltd., Mr. Cass writes:—"I am very much impressed with what I saw there. You have a very good tin mine with abundance of high grade tin which can be cheaply mined and milled. The prevailing rocks and geological features are typical of the tin fields I have visited in America and Australia. I notice a good deal of folding in the strata, but I am of opinion that the country will become more settled at about one hundred feet. No. 2 Shaft: I have closely inspected this portion of the workings and was greatly impressed by the large body of iron ore, ore very rich in tin, to a certain extent not visible to the naked eye, but on crushing this ore and washing it in the pan it gives a high percentage of black tin which really surprised me. The shaft is sunk on the outside edge of this ore body, which in my opinion continues in a north-easterly direction up towards the hill. I have marked a site 120 feet from No. 2 for a further shaft to be sunk, and I am of opinion that you will again cut this lode at about 50 feet or less. It has every appearance of continuing and making bigger as it goes into the hill. I have explained everything in detail to your man. At the bottom of No. 2 I notice you have come on to a big quartz lode carrying good tin values. This lode is also underlying towards the hill. This ore is very clean and free milling. In dealing with No. 1 Shaft (Eastern Section) I should advise you not to sink it any deeper at the present time. My reason for so advising is that you have ample payable ore over a large area at a shallow depth which can be handled very quickly and cheaply. The ground from the grass roots down is carrying tin. I would suggest that the whole of this ground be worked in faces similarly to a quarry, as it will be quick and cheap and expose any rich 'shoots.' In the Central Section I feel sure a very rich lode of tin-bearing ore can be found in the very near vicinity to the copper workings. I found some very rich tin ore in the old copper dumps. I was unable to descend the shaft in the Western Section, but from what I saw around the shaft I am of opinion that big and rich lodes exist there, as the tin I did see was in well-developed crystals in the form of short prisms with four or eight-sided pyramidal summits. I am quite of opinion that the Eastern, Central and Western Sections are of one occurrence, but have been disturbed in the folding period. I would like you to do a little prospecting higher up the hill, in between the Western and Central workings, for I am convinced payable tin can be found close by. In conclusion, I must say that you have a very good property, and I predict a bright future for the company."

Rhodesia Railways Trust.

The report of the Rhodesia Railways Trust, Ltd., for the year ended 31st March last states that the net earnings of the Rhodesia and Mashonaland Railway Companies, before providing for their debenture interest and other fixed charges, for the year ended 30th September, 1916, amounted to £869,113, against £639,737. The increased revenue was principally due to a considerable expansion in the volume of mineral traffic exported via Beira and to an increased tonnage of fuel supplied to the copper mines in the Belgian Congo. During the year the working of the Rhodesia Railways showed a profit of £205,157, as against £58,175, the total credit balance at the 30th September last being £383,086, which has been carried forward. The accounts of the Mashonaland Railway Company showed a loss of £17,253, against a deficit of £97,035, the total debit balance at the 30th September last amounting to £1,438,849. The two railway companies combined showed a profit of £187,904, and there was an accumulated loss on working of £1,066,763 The advances to the Mashonaland Company, including accrued interest to the 31st March last, amounted to £1,234,446, as against £1,257,916. The balance on profit and loss account amounted to £6,285, which with £109,779 carried forward gives a balance of £116,063, which it is proposed to carry forward.

We have received the latest quarterly issue of the Pilgrim's Rest Goldfields' *Mines and Claimholders' Journal*. The present number contains Mr. J. E. Anderson's first article on "The Strata of the Pilgrim's Rest Gold Fields," with section. It epitomises the general information current on the Pilgrim's Rest fields, together with some of the author's own observations in a long and varied experience. These articles will prove invaluable to newcomers on the Pilgrim's Rest fields, as well as a handy source of reference to those acquainted with their economic geology. A number of other interesting articles go to make up the issue.

Union Income Tax: A Guide to the Act.

In view of the complications and uncertainties of the South African Income Tax (Consolidation) Act, 1917, the public will welcome the publication of "Eveleigh's Income Tax Guide," issued by the Accountants' Book Service Supply, P.O. Box 3531, Johannesburg. The author, Mr. F. W. Anton Eveleigh, A.S.A.A. (Eng.), F.S.S., is an incorporated accountant, who was also the author of "The Provisions in the Finance Act, 1909, relating to income tax" (English Act), and "An Epitome of the Income Tax Act, 1914" (Union Act), etc., and was editor of "The South African Accountant and Auditor" for the three years 1914-16. The book under notice comprises eleven chapters, entitled respectively: Administration, Income Liable to Taxation, Persons Liable to Make Returns, Normal Tax, Super Tax, Dividend Tax, Excess Profits Duty, the Profits of Mining, Insurance Businesses, Penalties and Objections, and Appeals. These head lines will indicate the general scope of the main body of the work. In addition, the volume gives the text of the Act itself, the Regulations published in terms of section 99, and the various forms prescribed for use in connection with the administration of the provisions, together with a very complete and useful index to both the Act and the Regulations. We understand that over one thousand copies of this work were sold prior to its publication, and that the Union Government has adopted the book for use in the various Inland Revenue Departments throughout the Union, and has taken a hundred copies. The practical examples with figures and the full and careful explanation of the new taxes, dividend tax and excess profits duty, together, as already stated, with index, will be found remarkably informative and complete. There are some 1,200 references. The price of the publication is 8s. 2d., post free for ordinary copies, and 11s. post free for the interleaved copies as supplied to the Government. Copies may be obtained from the Accountants' Book Service Supply, Box 3531, Johannesburg.

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THE WEEK IN THE SHAREMARKET.

Activity Monopolised by Springs and Government Areas—Advance in Small Stocks.

On Friday afternoon Springs Mines recovered all they had lost in the morning. Monteleos had a bad drop, touching 27s. 6d. at one time, closing 28s., 30s. Springs were again to the fore at Saturday's opening, making 69s. 6d. Another big advance was recorded by S.A. Alkali, with buyers at 80s. after a sale of an odd lot at 72s. 6d.

At the Call prices were maintained, with the exceptions of City Deep and City and Suburban. Van Ryn Deeps fully recovered from their recent slump, and there was an improvement in nearly all the other stocks. In the course of the morning Alkali advanced to 85s., and Brakpans to £5 10s. buyers; while Springs dropped back 6d.

Monday's opening brought Springs to the fore once more, and very soon they passed their last record, coming 70s. sales and buyers. At the Call they held their own. Modder B's and Deeps hardened, while Modder East remained again at three-halfpenny differences. Springs continued to advance through the day and closed at 73s. buyers. Alkalis reached 90s., and Van Ryn Deeps fell back after their brief recovery.

On Tuesday morning the run on Springs continued, but Government Areas came in to dispute pride of place with them. With a closing price of 67s. buyers, they soon rose to 70s., sales and buyers. At the Call, City Deeps dropped again. Daggafonteins and their Options were also weak. The Modder stocks were firm. In the smaller goods, New Eras are firming up. Springs touched high-water mark at 75s., and Government Areas at 71s. 3d., closing, the former at 73s., and the latter at 70s. 3d. City Deeps had a further drop.

The Stock Exchange was closed on Wednesday for the Jewish Day of Atonement.

Business opened on Thursday, with Springs Mines and Government Areas in the forefront. Springs Mines, starting with sales at 74s., fell to 73s., while Government Areas hardened on their closing prices. At the Call, the market was very active, dealings in 33 stocks being put through. The feature was the demand for some of the small stocks and the large parcels which were dealt in. £7 was offered for 1,000 Modder Deeps; over 2,000 New Geduld Deeps changed hands at advanced rates; Lace Props. had a substantial rise, as also Lydenburg Farms. Bush Tins which were recently going begging at 4d. fetched 11d.; Concrete Constructions, whose existence had been almost forgotten, were largely bought at 4s. 6d. to 4s. 9d. Randfontein Deeps were also harder, while New Eras fell off, Government Areas held their own, but Springs fell to 72s. 9d.

The tap seems at last to have stopped running by which the Market has been flooded with Modder Easts and their Options, judging from the buying of all three at the Call.

The dealings in outside stocks for the past week were as under: Sales: Monteleos, 27s. 6d. to 32s.; S.A. Alkali, 72s. 6d. to 90s.; Henderson's Options, 1s. 5d.; Union Tins, 3s. 6d.; Phoenix, 1s.; Betsiriry, 5s.; Union Tins, 3s. 6d. buying and selling prices, 6s. to 8s. buyers; Areachaps, 6s. 8d. to 7s. 2d. buyers, sellers 7s. 3d.; South Van Ryns, 9s. 3d. to 10s. 6d. buyers; Henderson's Estates, 5s. 5d. to 5s. 6d.; Corundums, 12s. 9d. buyers; Micas, 15s. 3d.; Sakalavas, 5s. 6d. to 6s. 3d. buyers; Union Fives, unchanged at 103s. sales.

On Thursday afternoon Van Ryn Deeps rose to 65s. 9d. At one time City Deeps fell to 67s. 6d., but closed at 68s. Springs Mines fluctuated between 72s. and 72s. 6d., and Government Areas between 71s. and 71s. 3d. At the call on Friday business fell off and prices were irregular, as the following alterations in the last quotations will show: Sales: Bantjes, 2s. 6d.; Bush Tins, 8d. and 6d.; City Deeps, 69s. and 69s. 3d.; Mines Selections, 27s. 6d.; Cloverfields, 8s. 7d.; Dagga Mines, 26s.; Geduld Proprietary, 38s.; Government Areas, 70s. 9d.; Lydenburg Farms, 8s., 7s. 10d. and 7s. 11d.; Lace Props, 6s. 10d.; Modder B., £7 18s.; Modder Easts, 20s. 9d. and 21s.; Pretoria Cements, 92s. 6d.; S.A. Lands, 5s. and 5s. 1d.; Springs, 72s. and 71s. 9d.; Van Ryn Deeps, 65s. 6d. Other quotations: East Rand Mining, buyers 15s. 6d.; Modder Deeps £7 1s., £7 2s.; New Modders, £21 10s. buyers, New Eras, 10s. 9d., 11s.; Rand Selections, 81s., 81s. 6d.; Sub Nigels, 23s. 3d., 23s. 6d.

	Fri., 21st.	Sat., 22nd.	Mon., 24th.	Tues., 25th.	Wed., 26th.	Thurs., 27th
African Farms	8 3*	8 3*	8 6*	8 4*	—	8 3*
Apex Mines	7 3*	7 0*	7 0*	7 1*	—	7 1*
Aurora West	—	—	12 0*	—	—	12 0*
Bantjes Cons.	2 6*	2 9*	2 9*	2 10	—	2 10
Blaauwbosch Diamonds	—	—	99 0+	99 0+	—	—
Brakpan Mines	—	109 0+	110 0	110 0*	—	107 6x
Breyten Collieries	8 6*	8 6*	8 6*	8 6*	—	8 6*
Brick and Potteries	—	5 0*	5 0*	5 0*	—	5 0*
Bushveld Tins	0 5+		0 4	0 6	—	0 11
Cassel Coals	—	25 0*	25 0*	—	—	—
Cinderella Cons.	3 9	3 6*	—	—	—	—
City and Suburbans	23 9*	23 6	23 6*	23 6*	—	23 6
City Deeps	71 9	71 6	—	71 0	—	69 6
Cloverfield Mines	8 5*	8 6*	8 6*	8 4*	—	8 9
Clydesdale Collieries	12 0*	12 0*	12 0*	—	—	—
Concrete Construction	—	—	—	—	—	5 0
Cons. Investment	17 0*	17 3*	17 3*	17 3*	—	17 0*
Cons. Langlaagtes	18 0*	18 0*	18 0*	18 6+	—	18 0*
Cons. Main Reefs	13 9	14 0*	14 0*	14 0*	—	14 0
Cons. Mines Selection	27 0*	27 0*	27 6	28 3	—	28 3
Crown Mines	—	—	—	46 3*	—	—
Crown Mines Debentures	—	—	£93+	£93+	—	£90½*
Daggafontein Mines	26 6	27 0	26 6*	25 6	—	25 3
Do. Options	12 3	12 3	12 4½	12 0	—	12 0
Durban Rood. Deeps	12 0*	12 0*	12 6	12 3*	—	12 6*
East Rand Coals	2 0*	2 1*	—	2 0*	—	2 0*
East Rand Deeps	0 11*	0 11	0 11*	1 0+	—	1 0+
East Rand Mining Estates	—	11 6*	—	—	—	13 6
East Rand Props.	5 0*	5 9	6 0	5 6*	—	5 6*
East Rand Debentures	£63*	£63*	£63*	—	—	£53*
Eastern Gold Mines	1 0*	1 0*	1 0*	1 0*	—	1 0*
Ferreira Deeps	—	16 0*	—	16 0*	—	—
Frank Smith Diamonds	3 9*	4 0	3 11	3 11	—	3 10*
Geduld Props.	36 0	36 0	35 9*	36 6	—	36 9
General Minings	4 0x	—	—	—	—	—
Glencairns	1 0*	—	—	1 0*	—	—
Glynn's Lydenburgs	—	20 0*	21 0+	21 0+	—	—
Government Areas	67 0	67 3	67 0	70 0	—	71 6
Jupiters	3 10*	3 10*	3 9*	3 10*	—	4 0
Knight Centrals	3 1*	3 2*	3 2	3 3	—	3 2*
Lace Props.	5 9*	5 9*	5 10+	5 9	—	6 0
Leeuwpoort Tins	12 3*	12 3*	12 6*	12 6*	—	12 6*
Luipaardsvlei Estates	4 0+	—	4 0+	4 0+	—	—
Lydenburg Farms	7 0*	7 3*	7 4*	7 4	—	7 8
Main Reef Wests	3 3*	3 3*	3 3*	3 6+	—	3 4+
Main Reef West Debs.	£55*	—	£55*	—	—	—
Meyer and Charltons	103 6*	105 0	—	—	—	110 0+
Middelvlei Estates	1 2*	1 0*	—	1 0*	—	—
Modderfontein B.	159 0	157 6*	158 0*	158 0*	—	158 0*
Modder Deeps	137 0	136 9*	138 9	140 0	—	140 0
Modder Easts	20 0	21 1½	20 0	21 1½*	—	20 7½
Do. Options (3 years)	7 11*	7 11	7 9*	7 10*	—	8 0
Do. Options (4 years)	8 0*	8 1*	7 11*	8 0*	—	8 0
Natal Navigation Colls.	19 9*	—	20 0	20 0+	—	19 9*
National Banks	250 0*	240 0*	260 0x	260 0	—	260 0x
New Boksburgs	1 3+	—	—	1 3+	—	—
New Eland Diamonds	27 6*	27 6*	27 6*	—	—	—

*Buyers. †Sellers. xOdd lots. BEx London.

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150 only 16 lb. Springs, New.

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	Fri., 21st.	Sat., 22nd.	Mon., 24th.	Tues., 25th.	Wed., 26th.	Thurs., 27th.
New Eras	10 4	10 7	10 11	11 5	—	11 1
New Geduld Deeps	6 7*	6 8*	6 8*	6 10	—	7 0
New Heriots	34 0*	35 0*	35 0*	—	—	34 6*
New Kleinfonteins	18 6	18 6*	18 6*	18 9	—	18 6*
New Modders	422 6	425 0	430 0A	425 0*	—	425 0A
New Rietfonteins	1 0*	1 0*	—	—	—	—
New Unifieds	8 0†	8 0†	—	—	—	—
Nigels	2 0*	2 0*	2 0*	2 0*	—	2 0*
Nourse Mines	19 6†	19 6†	19 0B	18 6*	—	18 0*
Pretoria Cement	93 6	93 0*	95 0†	95 0†	—	94 6†
Rand Collieries	2 6*	2 6*	—	—	—	—
Rand Klips	9 4*	9 6*	9 6	9 3*	—	9 7*
Rand Nucleus	1 3*	1 4*	—	1 4	—	1 4*
Rand Selections	84 0	84 6	85 0	87 0	—	86 6
Randfontein Deeps	4 3*	4 4*	4 3*	4 6*	—	5 0
Randfontein Estates	14 0*	14 6*	15 0	15 0†	—	14 0*
Rooiberg Minerals	11 3*	11 1*	11 0*	11 0*	—	11 1
Rose Deeps	18 0*	18 0*	18 0*	—	—	18 0*
Ryan Nigels	2 6*	2 6*	2 6*	2 6*	—	2 6*
Shebas	1 3*	1 3*	1 4*	—	—	—
Simmer Deeps	2 0A	2 3*	2 6*	2 6*	—	2 7
S.A. Breweries	29 6†	29 6†	29 6†	29 6†	—	—
S.A. Lands	4 7*	4 7*	4 8*	4 7*		4 9
Springs Mines	67 9	69 6	70 0	73—9	—	72 9
Sub Nigels	22 9*	22 9*	22 9*	22 9*	—	23 0
Transvaal Lands	11 6*	15 0†	15 0†	15 0†	—	15 0†
Transvaal G.M. Estates	16 6†	17 0†	17 0†	17 0†	—	17 6†
Van Ryn Deeps	63 6*	64 9	64 0*	64 0	—	64 9
Van Ryn Estates	35 0†	—	—	—	—	35 0†
Village Deeps	—	18 6*	19 0*	19 0*	—	19 0*
Village Main Reefs	14 3*	14 3*	14 3	—	—	15 0†
Welgedachts	17 0*	17 0*	19 0*	—	—	—
Western Rand Estates	1 6*	1 6*	1 6*	1 6*	—	1 6*
Witbank Collieries	43 0*	43 0*	—	—	—	—
Witwatersrands	—	37 6†	—		—	—
Wit. Deeps	9 0	9 3†	7 6†	7 0*	—	7 6
Wolhuters	8 1†	7 10*	7 11*	8 0†	—	8 3†
Zaaiplaats Tins	8 3*	8 1*	8 2	8 6	—	8 6

During the week there were sellers of Union 4 per cents at £82 7s. 6d., while there were buyers of Union 5 per cents. at £102 10s.

*Buyers. †Sellers. AOdd lots. BEx London.

"Johnnies" Annual Meeting.

The annual general meeting of the Johannesburg Consolidated Investment Company, Ltd., will be held on November 27.

Pretoria Iron and Steel Co.

It is understood that the Pretoria Iron and Steel Company (which has as its object the smelting of the town lands ore) has had its capital almost twice over-subscribed.

Since the beginning of the year the average number of auction sales of mining plants in Rhodesia has been two per month, says the Gatooma paper. This is a striking illustration of the difficulties of "carrying on" with present high costs and shortage of stocks.

Central Mining Corporation.

A London contemporary says: "Lieut.-Col. S. H. Pollen has been elected a director of the Central Mining, thus strengthening the purely British element. Since Sir Lionel Phillips crossed from South Africa to assume the chairmanship and take charge of the corporation's affairs he has thoroughly anglicised the directorate, thus removing any possible ground of suspicion of Teuton domination."

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Rhodes and the Rand.

AN INTERESTING REMINISCENCE.

In an article entitled "The Most Wonderful Man I Ever Knew," in the "American Magazine" for July, Mr. John Hays Hammond gives the following interesting anecdote about the inception of deep level mining on the Rand by Cecil Rhodes: "A revelation of the methods by which Mr. Rhodes's mind operated is shown in his championship of deep level mining—his starting project to risk millions of dollars in sinking shafts several thousand feet into the earth on the chance of finding gold there. All mining on the Rand hitherto had been of the 'outcrop' species. To sink unprecedentedly deep shafts with the idea of intersecting a gold reef in the bowels of the earth was a most daring proposal. This is the story of the start of his undertaking: Mr. Rhodes, Dr. Jameson and I, together with some of my engineers, were camping out one night in a wild part of Rhodesia, where the lions were roaring around us and had to be constantly frightened away by a wall of fire and the firing of guns. It was not uncommon in these regions for lions to dart in and snatch our donkeys or even to carry off a negro boy occasionally. As we sat about the fire Rhodes began to discuss the future. He wanted to know how long the Rand reef would last. I told him that geologically there was no reason why it should not last many more years—that there was no reasonable limit, from an engineering point of view, to the depth mining could be carried. Then I went on to explain that, whereas outcrop claims were selling anywhere from 10,000 dollars to 100,000 dollars per acre, we could pick up all the other land for deep level mining at 50 dollars or 100 dollars per acre, provided no one discovered what we were trying to do. I figured out that, allowing for the cost of sinking shafts to a depth of 3,000 feet, his profits would be 20 or 30 times as great as those yielded by the enormously costly outcrop lands. 'Why would it not be good business to sell the outcrop company holdings?' Rhodes asked, 'and quietly buy all the ground along the deep levels for 10 or 12 miles, and start mining at 2,000 to 5,000 feet?' 'I recommended that to Barnato,' I said, 'but he was too busy with other things to bother about it.' 'Let's send a cablegram to London at once!' Rhodes exclaimed. About two o'clock in the morning my secretary—now Lord Saye and Sele, a fearless adventurer, a D.S.O. man and a crack shot—started, with a couple of natives, on a 500-mile ride across dangerous country to the nearest railway station at Mafeking, with a cable to the London directors of the Consolidated Gold Fields. The cable was briefly this: 'Have decided best policy for company should be sell out our entire holdings in outcropping companies. Do this at once. Cable reply.' It took over a month for our representative to cover the land journey, receive the reply and rejoin us near the Zambesi, a total ride of over 1,000 miles. And this was the wording of the directors' reply: 'We don't understand your cablegram. Do you wish us to liquidate company? This cannot be done without full explanation to directors.' Rhodes was furious. He was not in the habit of having his explicit instruction fail to be carried out. He sent back this cablegram: 'Do exactly what I instructed you to do at once without asking questions. I take full responsibility.—C. J. R.' This time the London agents obeyed. When we got back to Johannesburg, several million dollars' worth of shares had been turned into cash at very high prices, the market being then in the thick of a boom. We immediately set machinery in motion to acquire all the land we wanted, and though there was infinite haggling by some of the parties in interest, we finally got nearly all we were after, and the whole deep-level plan of mining was mapped out and started. We had to spend millions before we reached a trace of gold, and more millions before we won a single ounce of metal. But within two years we had made 10,000,000 dollars profit on the transaction. Had it not been for deep-level mining the Rand would have been nearly exhausted by now."

The Committee of "Le Foyer des Orphelins," a Belgian Association for the formation of Family Homes for Belgian War Orphans, makes a warm appeal to the readers of this paper to help them by kindly forwarding them as many used stamps as possible, immaterial from which country or qualities, everything is welcome. By sending same, you will help to build a comfortable home for the little ones whose fathers have fallen on the field of honour, fighting for Belgium, for liberty and right. Many thanks in anticipation to all who will comply with this request. We kindly beg the readers to ask their friends to collect them, and every donor will get a pretty souvenir of this noble work of charity. Donations will be accepted with thanks by the President of the Committee, Mr. Josef Dom, 123 Harstenhoekweg, Scheveningen, The Hague, Netherlands.

The Kroonstad Coal Estate Company, Ltd., has declared a dividend of 2½ per cent., payable to all shareholders registered on the 31st August, 1917.

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ANNUAL REPORT OF THE DIRECTOR OF THE U.S. BUREAU OF MINES.

There is much interesting reading in the recently issued Sixth Annual Report of the Director of the U.S. Bureau of Mines for 1916, but want of space compels us to restrict our review to the following abstracts:—

A brief summary, covering over four printed octavo pages, is given of the more important accomplishments during 1916, of which the following may be mentioned: More than 8,400 miners were trained in mine rescue and first aid. On June 30, 1916, the total number of miners trained by the Bureau since its organisation was 42,045. Representatives of the Bureau attended and investigated 89 accidents throughout the United States. Forty-seven mine rescue and first-aid contests were held under the auspices or with the assistance of the Bureau of Mines. Investigations of the technology of molybdenum and its ores were completed, and a bulletin, describing methods of occurrence, concentration and use, was prepared for printing. The properties of mine gases were investigated and a descriptive chart for display at mines was prepared for printing. A gas detector for quickly determining inflammable gases in mine air was perfected. During the year 21 bulletins, 33 technical papers and 2 miners' circulars were published. Proceeding to details, the report states, *inter alia*, that the Bureau of Mines has since its inception had charge of the analysing and testing of fuels purchased by the Government. This work has included tests conducted with a view to greater economy in the selection, handling and use of fuels and of fuel-burning equipment.

Tests of Breathing Apparatus.—The following is a brief summary of the testing work on breathing apparatus done during the year: Twenty-four tests were made with the four types of breathing apparatus, the Draeger, Fleuss, Westphalia and Gibbs, to determine the percentage accumulation of hydrogen and nitrogen in the circulation system of these various types when "oxygen" was used similar in composition to that furnished to the various rescue cars and stations —that is, oxygen containing nitrogen and hydrogen in proportions ranging up to 3 per cent. and 1·3 per cent. respectively. Because of these tests, it is proposed to purchase oxygen for use on the cars and stations under specifications that will limit the percentage of hydrogen to 0·2 per cent. and of nitrogen to 2½ per cent. Two tests were made with the Fleuss apparatus in which electrolytic sodium hydroxide prepared in the lump form was used. Four tests were made with the same apparatus fitted with the "half mask" instead of the mouthpiece. These tests indicate that with the half mask it is possible to have an apparently air-tight fit before the wearer enters the smoke room and yet inward leakage may occur after he has been in the noxious atmosphere for a short time.

Work of Fuels and Mechanical-Equipment Division.—The purpose of the Bureau of Mines in its fuel investigations is to increase efficiency in the use of mineral fuels and to disseminate information leading to this result. During the past year work has been completed that makes it possible to vary the furnace design in a rational manner according to the chemical properties of the fuel to be used. The investigation of mechanical equipment for mines has for its purpose the prevention of accidents and the improvement of conditions under which the miner works. The Bureau has adopted a system of "approval" of devices that meet certain specifications prepared by the Bureau. During the year this system has resulted in accelerating the development of miners' electric lamps. There is reason to believe that 100,000 of these improved and safe lamps will come into use during the current year. During 1916 the following investigations were made: (1) Investigation of safety catches for coal-mine hoists. (2) Hoisting accidents. (3) A special breathing apparatus of an improved form for use in rescue work, largely developed during the previous year, was brought nearer completion and in form for manufacture. (4) The system of issuing a formal "approval" for apparatus has been applied to seven miners' electrical lamps. (5) Two types of explosion-proof coal-cutting equipment were approved. A new testing gallery has been provided by the manufacturers in order to expedite the work and to co-operate with the Bureau in its investigations. (6) Rules that set a proper standard of safety for the installation and operation of electrical equipment in bituminous coal mines have been prepared. (7) The beginning of an investigation of explosion-proof storage-battery locomotives has been made. (8) The testing of flame safety lamps for approval, lately undertaken, has required a review of methods and the designing of new equipment.

The Bureau will continue its studies in safety and health in these industries, but the Federal and the State Departments of Labour are now giving such close attention to this subject that it seems only necessary for the Bureau of Mines to co-operate with them in the matter of special technical questions that may come up from time to time. Other investigations made by the Bureau included, among others: (1) The corrosion of metals in mines. (2) Blast-furnace slags. (3) Manganese. (4) Origin and constitution of coal. (5) Mine gases and natural gas. (6) Fusibility and clinkering of coal ash. (7) Producer gas. (8) Physical and chemical tests for explosives. (9) Miners' houses and mine sanitation.

Ohlsson's Cape Breweries.

A further reduction of £10,500, to a total of £72,154, is exhibited in the accounts of Ohlsson's Cape Breweries for the year to March 31, and the Ordinary dividend, which fell from 8 to 6 per cent. 12 months ago, is to be lowered to 4 per cent., with £30,976 forward, as against £30,019. It is stated in the report that the difficult conditions of trading referred to in the last report have been accentuated during the past year, with a consequent decrease of profit, notwithstanding that the actual sales in volume were maintained. Since the date to which the accounts are carried a serious fire occurred at the pneumatic maltings adjoining the breweries at Capetown, which not only caused extensive damage to the buildings and machinery, but also rendered nearly the whole of the barley and malt stored there unfit for use. The loss was covered by insurance; but the export of barley and malt from this country being prohibited the question of providing for the requirements of the breweries caused much anxiety to the directors, who are, however, now assured that the requisite supply of malt is secured. The work of restoring and re-equipping the maltings is being proceeded with.

Under the style of the Walmer Papyrus Pulp Company, Ltd., a company is being formed at Christiana, Norway, to use the papyrus which grows in North Zululand. A concession has, it is reported, been obtained which permits the company to exploit the papyrus for twenty years. The share capital is £150,000, fully paid up.

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THE WEEK IN THE MINING MATERIAL AND ENGINEERING TRADES.

Reduction in Price of Galvanised Iron—American Capital in Support of the Rand—The Warning About the Lower Grade Mines—Standardisation Well in Hand—Speculation Not Encouraged.

Business opened on Monday with an atmosphere of undefined expectacy that something was likely to revivify trade—something in connection with the Far Eastern Rand and the Government Leases, and before the luncheon hour this information was confirmed, thus putting the members of the Commercial Exchange in a very good humour. Naturally these are anxious times, and anything to give business a brighter outlook for the future is very cheering and hopeful after a spell of indifferent trading. As the week wore on the reason was made public in the shape of the registration at Pretoria of the Anglo-American Company, with a capital of one million, with power to increase and borrow up to four millions. Plainly the new enterprise has great possibilities for the future of the Rand, especially if it is lucky enough to strike a rich patch in its initial stages.

Chamber of Mines Report.

It is a great blessing that we have a very live Chamber of Mines at this time of such critical war conditions. Everyone should study the report of the speech on Septemmer 24th, as some pungent remarks are made as to the struggle for existence of the poorer grade mines, especially on account of the increased taxes, labour bonuses, and the shortage of native labour. It shows that there must be no misunderstanding on the part of the Government or the community as a whole, who are vitally affected, as to the actual state of affairs. Some good work has been done at the conference of employers and employees by establishing joint boards of reference, with the object of preventing disputes proceeding to undesirable lengths. In touching on the pooling question, the President also stated that it had enabled the Chamber to cable to the British Minister of Munitions that until further notice no permits need be issued for certain sizes of wire ropes. This had been brought about by the reduction in the number of spare ropes that need be kept under the pooling conditions, as compared in the past when each mine relied on its own stocks. Further, the technical advisory committee has under deliberation the standardisation of machinery spares and other materials, from which much is hoped for.

Standardisation Committee.

This committee is very much in earnest and has already made a start on mill screenings. It appears there are as many as 99 different kinds and sizes, which have been reduced to 22 various sizes and meshes. Not so long ago it was stated that suitable screening for coal mines could not be made in Johannesburg, but when the local manufacturers were put to the test, the desired article was forthcoming and has now taken its place as an excellent substitute for the imported. Nevertheless there is a difficulty in making the finest of fine mesh, as compared with the imported which can only be overcome by the up-to-date machinery that can only be obtained after the war from oversea. Another difficulty is in obtaining the various sizes of wire and the price. For example, a wire that could be obtained in pre-war days at 13s. had risen to 72s. 6d. per 100 lbs. when application was made for more supplies during the present week. So far only screenings have been tackled, but the committee are about to deal with mill spares, grizzly bars, rails, skip wheels, and piping.

The Trend of Business and Expansions.

The outstanding feature is that several firms are awakening to the fact that the Springs district is one of the coming

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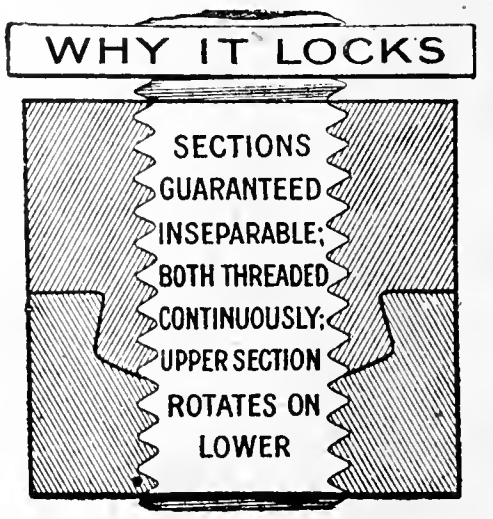

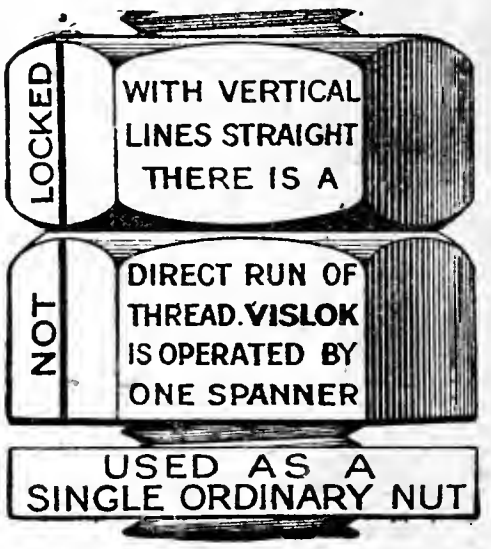

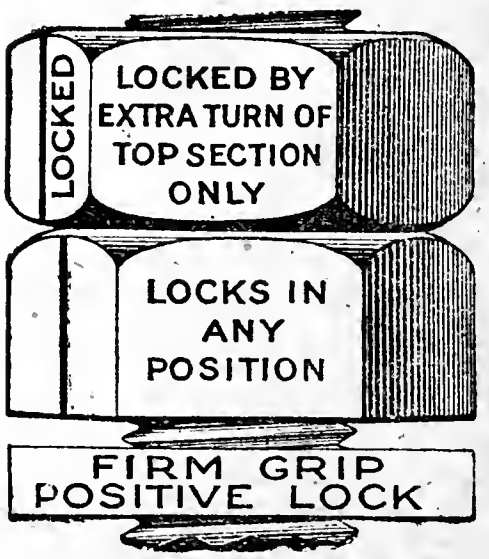

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trade centres, and, as one manager remarked, it is no use sitting still in Johannesburg and not recognise the writing on the wall, therefore now is the time to prepare oneself for the newer conditions which must come about in the near future, and the man on the spot will score, especially in the early days of development of the new Government mining areas. The idea is only to have branches, because with the telephone and motor car, and maybe flying machines, the central office in Johannesburg need not upset its present equilibrium. How much or how little has been done in securing land in the Far Eastern Rand cannot be disclosed, but actual transactions have been made in that direction. Local business is rather in the quiescent stage, apparently awaiting events, more particularly to perceive the ultimate effects of the American shipments on the water and at the coast. In this connection there is much selling to arrive and some outrageous figures are quoted; as, for example, £200 was asked for a line which could be had for just over £20 in pre-war days, which was laughed out of court, seeing the nominal quotation to-day is only about half that asked. Another thing which happened during the week was a cash offer for a hundred cases of oil, but as no name of buyer or principal was forthcoming, and positively declined, the offer was spurned, as it savoured too much of cornering. Notwithstanding the possibility of closing some of the low grade mines, the month closes rather above the average of the first half, as there are a few more orders available, and for some reason or another a brighter tone prevails.

Oils, Paints, Colours, Varnishes, etc.

Business between the jobbing contractors and the supply houses is better, and much additional business could be done if stocks were more assorted and less expensive. The Reef storekeepers complain that the high prices of oils, lead, etc., is having a detrimental effect on the selling, which means putting off jobs awaiting the furbishing hand. The cable information available is exceptionally meagre this week, as somehow the whole commercial fabric seems to have dropped into a waiting ruck both here and oversea, chiefly through the very high level of prices, which has created an economical craze that, when once established, is a sure and certain check on active business. When these lines appear in print the tension of waiting may be relieved, as two European mails can be expected to be delivered during the week-end.

Second-hand Machinery and Material.

A big tube mill has been sold for Rhodesia, in the Bulawayo district. The Delagoa Bay dealers are purchasing boilers and engines for the Mozambique sugar plantations and mills. There is a big demand for wire ropes of all sorts and sizes, presumably on account of the message to the British Minister of Munitions to curtail priority certificates for the export of the new article, as the mining industry has sufficient for the present. The agriculturists are well in the second-hand market for threshers, maize shellers, and grinders. A few enterprising men have secured plants, and the necessary steam power, to deal with the mealie crop in all its various manipulations. These go from homestead to homestead and are said to be doing a profitable business.

Various Trade Jottings.

The Customs people are asking for suggestions to re-classify the particulars given in their annual statements. Camphor has advanced to 5s. 6d. per lb., with fair stocks here, and Japan is offering it at 4s. f.o.b. The chemical trade is quite fair, but no heavy contracts or outstanding features are in evidence. There is a rumour that the American Government has commandeered all tin plates for the purpose of canning foodstuffs for the army. American lubricating oils are expected to be advanced from October 1st, chiefly on account of the dearer freight conditions. Jarrah wood has

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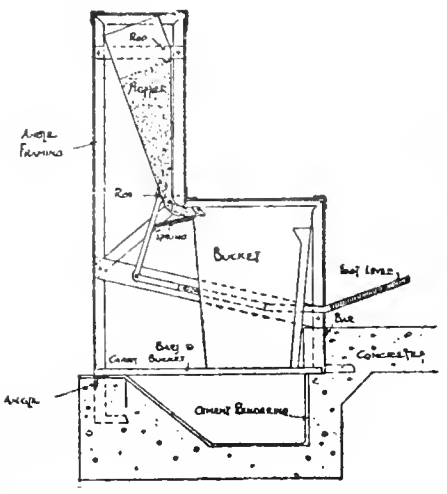

SECTION showing Hopper and Gearing in position of rest, or immediately after foot lever has been released.

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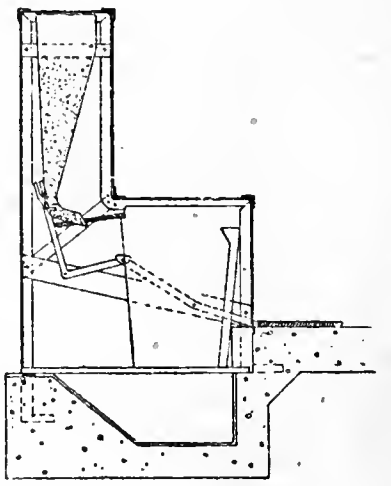

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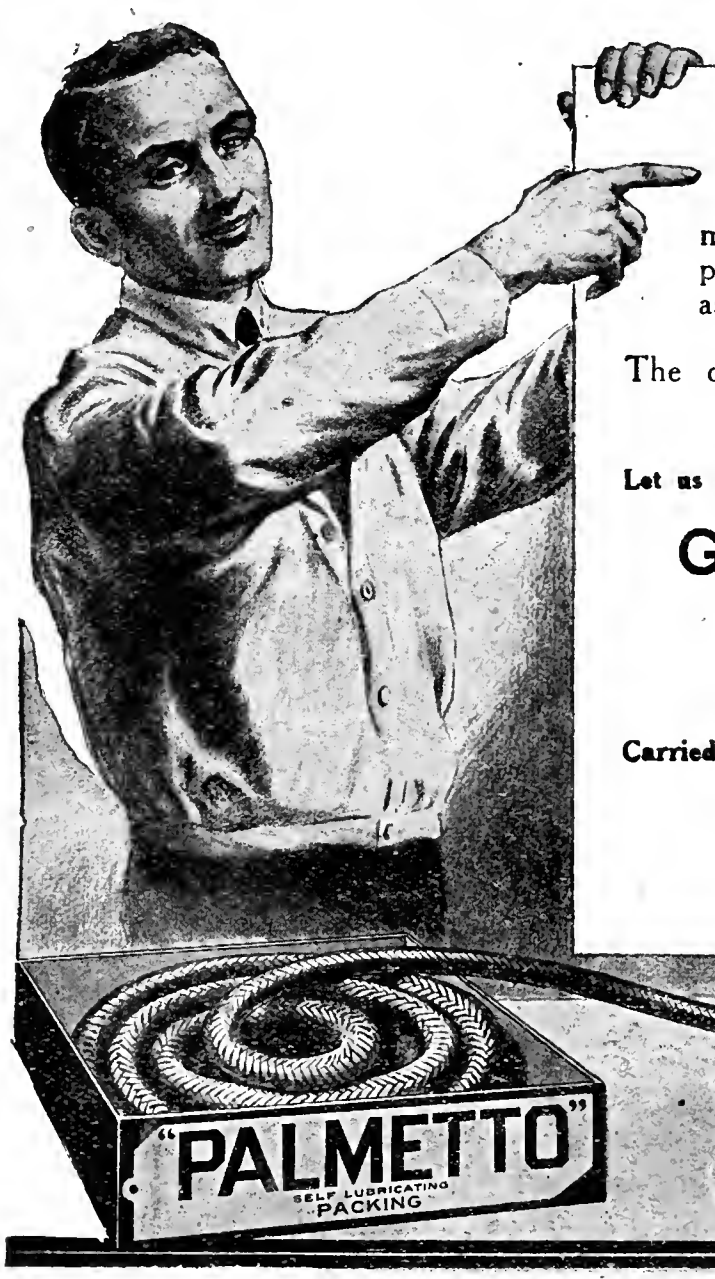

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advanced from 9s. 6d. to 12s. 6d., chiefly because freight is not available from Australia. What with the competition to secure a footing in our market from Canada, America, Australia, etc., the remark that the "eyes of the world are upon South Africa" seems very appropriate.

Reduction in Galvanised Iron.

At last the continued soaring of prices for galvanised roofing iron has received a check, and its flag lowered twopence per foot, making it 2s. for 10 ft. lengths of 24 gauge. The reason is not altogether very clear, but one thing is certain, that the impetus given to the tile trade as a substitute for galvanised roofing iron is one of the chief reasons, if not the chief. Then again there are the cargoes on the water from America, and although nothing definite seems to be known as to the aggregate quantity, yet the reduction is an indicator that very fair consignments are coming—hence the nervousness of holders.

Revised Price List.

Building Materials.—Timber: Deals, Baltic, 9 x 3, 1s. 3d. to 1s. 4½d.; flooring, 4½ x ⅞ and 6 x ⅞, 8¼d. to 8½d. per square foot; flooring, 4½ x 1⅛, 9½d.; and 6 x 1⅛, 9½d.; ceilings, 6 x ½, 4½d. to 1¾d. per square foot; pitch pine, 8s. to 8s. 6d. per cubic foot; Oregon, 6s. 6d. per cubic foot; clear pine, ½ in. x 12 in., 11½d. per foot; 1in. x 12in., 1s. 1d.; teak, 16s. 6d. to 17s. 6d. cub. f ; jarrah, 12s. 6d. cub. ft.; poplar, 1in. x 12in., 1s. 1d.; scantling, 1s. 3d. to 1s. 4d. per foot; beaver boards, 6d.; galvanised iron, 24 gauge, 6ft. to 10ft., 2s.; 11ft., 2s.; 12ft., 2s. 2d.; 26 gauge, 6ft. to 8ft., 1s. 10d.; 9ft. and 10ft., 1s. 10d.; flat galvanised, 24-gauge, 30s. sheet; 26-gauge, 25s. sheet; floor brads, 45s.; ceiling, 47s. 6d.; wire nails, 47s. 6d. to 55s. per 100lb.; locks, rim, 66s.; mortice, 70s. per dozen; steel ceilings, 75s. to 80s.; roofing material, 1 ply, 35s.; 2 ply, 45s.; and 3-ply, 47s. 6d. per roll.

Bricks, cement, lime, etc.: Pretoria Portland Cement, 9s. 3d. per bag; 8s. 3d. truck loads; lime, white, unslaked, 7s.; truck loads, 6s.; slaked, do., 5s.; blue 3s. 6d.; plaster lime, 4s. 6d.; bricks, stock delivered, 50s. to 52s. 6d.; wire cuts, 55s. to 70s.; pressed, 70s. to 80s. per 1,000; road transport difficult to obtain; salt and white glazed bricks, £27 10s. per 1,000; roofing tiles, £15 to £27½ per 1,000; glazed tiles, 10s. 6d. to 17s. 6d. per yard; paving cement tiles, 8s. 6d. per yard laid; reinforced concrete columns, 6 ft. plain, 22s. 6d.; fluted, 24s.; fireclay bricks, £7½ to £9½, at kiln, per 1,000; clay chimney pots, 36s. to 70s., according to height, 12 in. to 18 in., per doz.; fire clay, 37s. 6d. per ton on rail.

Oils, paints, lead, oxide, gl... l, ... 4s. 6d. to 50s. per five gallons; white lead ... 3d. per lb. ... turpentine, 57s. 6d. 2 l 1-5 ... oxide in oil, 36s. per 100lb ... oxide 22 ... 27s. ... oil putty, all at 6d. lb.; paints ... plateglass, ¼in., 1s. 6d. to 5s ; do ... to 1s. 3d. per foot.

Grease, imported, A.F. axle, £2 ... per ton; tallow (local), 5½d. per lb., ... 2 5; Laurel paraffin, 19s. 6d., petrol, 32 ... oil, 6s. 6d. to 7s. 6d. per gallon; engine ... per case; cylinder, 26s. 6d. to 42s. 6d.

Chemicals: Mercury, £55 to £60 per 75lb. ... no definite price; bichromate potash, 5s. 6d. lb.; ... lb.; permanganate, 14s. lb.; alum, 6d. lb.; carbolic a... borax, 92s. 6d. 100 lbs., cyanide soda, 1s. 5d lb.; ... acetate lead, 77s. 6d. 100 lbs.; litharge (assay), 72s. ... cial) 58s. 6d. 100 lb.; zinc sheets and blocks, 1s. 9d lb.; ... crucibles, 5d. per number.

Electrical goods: Lamps, high volts, British, Holland, and American, 30s. wholesale, and 54s. dozen retail; carbon lamps, 12s. ... dozen; pure rubber flex, 6d. to 8d. per yard; 3/20 coils of wire, 30s. to 33s.; do., 3/22, 23s. 6d.; tubing, 18s. to 20s. 100 ft., keyholders, 6s. to 7s. 6d. each, round blocks, 3½in., 1s. ... dozen; lamp holder cord grips, 13s. 6d. to 15s. per dozen; switches, 5 amp., 42s. to 48s. per dozen; British glass shades, 30s. to 40s. dozen; porcelain shackles, 15s. to 18s. dozen; do., bobbins, 15s. to 25s. per 100; cleats, 22s. per 100; P.O. insulators, 18s.; motor, 3 h.p., about £35 to £37. new.

Iron, imported, ¼in. and ⅜in. round, 60s. to 65s. per 100 lb.; ½in. round, 60s. to 65s. per 100lb.; ¾in. round, 37s. 6d 100lb; 1in upwards, round, 30s. to 32s. 6d. per 100lb.; square iron, 30s. per 100lb.; flat iron, small shoeing sizes, 42s. to 45s.; flat, average width and thickness, 28s. 6d. to 30s.; round iron, local, ⅞in. upwards, 25s. 6d. per 100lb.; square iron, local, ⅞in. upwards, 25s. 6d. per 100lb.; flat iron, average widths and thickness, 25s. 6d.; mild steel bar, 5½d. per lb.; drill, 1s. per lb.; steel plates, 60s. to 67s. 6d.; some sizes unobtainable; hexagon and cuphead bolts, ¼in. diameter, 1s. 9d. per lb.; 5-16in. diameter, 1s. 6d. per lb.; ⅜in. diameter up to 3in. long, 1s. 3d. lb.; ⅜in. dia., 11d., 3¼in. and up long, 1s. lb.; ½in. dia. up to 2½in. long, 70s. 100lb.; ½in. dia. and 2½in. up long, 70s. per 100lb.; ⅝in. diameter up to 2½in. long, 57s. 6d. per 100lb.; ⅝in. dia., 2¾in. and up long, 55s. per 100lb.; ¾in. diameter, 2¾in. and up long, 50s. 100 lbs.; ⅞in. and 1in. dia., same price as ¾in. diameter; nuts, ⅜in., 1s. 3d. per lb.; ½in., 72s. 6d.; ⅝in. to 1¼in., 70s.; 1⅜in. and 1½in., 75s.; 1⅝in. to 1¾in., 75s.; 2in. up, 85s.; washers, all sizes, 45s.; rivets, 3-16in., 1s. 6d. lb.; ¼in., 5-16in., 1s. 3d. lb.; 7-16in., ⅜in., 1s. lb.; ½in., 10½d. lb.; ⅝in., 55s.; ¾in. up, 52s. 6d. 100 lb.; shoes and dies, 32s. 6d. to 35s., 100lb.; rails, £25 per ton; picks, 4lb., 40s. per dozen; shovels, 55s. to 60s. per dozen; drill hammers, 5¼d. to 6d. per lb.; hammer handles (best American), 14in., 3s. 6d.; 24in., 7s.; 30in., 9s. 6d.; 36in., 13s. per dozen; metal, anti-friction, 1s. per lb.

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The Week's Meetings.

CHAMBER OF MINES.

The President of the Chamber of Mines, Mr. E. A. Wallers, in moving the adoption of the report of the Executive at the general meeting of the Chamber on Sept. 24, said :—Gentlemen.—The report of the Executive Committee, which has been in your hands for some little while, contains references to a great variety of subjects which have been dealt with during the last quarter. I do not propose to comment on all the matters in the report, but only to direct your attention to those that require your particular notice. You will see that the gold output has been well maintained, as our production has a value of just under £26,000,000 for the first eight months of this year, compared with just over £26,000,000 for the similar period in last year. Some little while ago there appeared to be a tendency in local circles to doubt the continued vast importance to the Allies of our gold production. Feeling, as I did, that that view was not well founded I dealt with the subject in some detail at our annual meeting in March last. I would only add here that confirmation of what I then said has been in evidence just recently when we have seen by the cable advices that the United States and Japan have both prohibited the export of gold.

Now, although the output has, as I have just said, been well maintained, it is nevertheless indisputable that a section of this gold mining industry—i.e., the lowest grade section, which probably is about 25 per cent. of the whole—is at present having the greatest struggle for the continuance of its existence that has ever been experienced. I have no desire to appear as an alarmist, and I have already referred to the extremely difficult position of the lowest grade section of this industry in a letter to the Press a little while since. I refer to the matter again, however, because there must be no misunderstanding on the part of the Government and the community as a whole, who are vitally affected, as to the actual state of affairs. Briefly, it is this, that hitherto during the war period, the industry having been favoured with a reasonably good supply of native labourers, the low grade mines have just been able to survive the burden of the heavy additions to costs attributable to the war. They have staggered, but they have survived, and the net result of the position so far has been that the addition to working costs of well over £3,000,000 per annum spent by the industry has contributed to the vastly increased prosperity of the community. Dividends distributed to shareholders as a whole have been decreased, or in some cases non-existent. But although the low grade mines have survived this burden with an adequate native labour force, they cannot survive it if the present acute shortage in that respect is not appreciably improved upon. In other words, the combined handicap of higher costs attributable to war conditions and an inadequate native labour force is one which they cannot bear.

Native Labour.

The crux of the situation at the moment, therefore, is the native labour position, and from the figures in the report that you have in your hands you will see that the total number of natives employed in August was again somewhat less than employed in the previous months, this following upon a steady decrease since the beginning of the year. I may add that the number of natives employed at the present time by the gold mines is approximately 24,000 fewer than a year ago. Various causes have contributed to the reduction of the native labour strength, the most important being the expansion in the demand for native workmen in other industries. This is a period of the year when, as far as we are concerned, an influx of native labourers should be expected. The tide is turning very slowly, but there is just a slight indication that it has turned and that our position in this respect should slowly improve—that this may be so is very earnestly to be desired.

An unfortunate factor in connection with the native labour position is the outbreak of Typhus Fever in the Transkei and certain other areas of the Cape Province. It is probable that the disease has been in existence in those areas for some time, but apparently it has until recently been of so indefinite a character that its real nature has not been detected by medical men. although I understand Government have repeatedly sent men to elucidate the problem. Until recently, therefore, the disease had been known as black fever, but a few months ago the fever commenced to exhibit signs by which medical men were able to diagnose it definitely as typhus fever. Moreover, in the last few months it has become of increasing virulence and more widely spread, and the Government medical authorities were able definitely to declare it to be typhus fever. We at once got into communication with the Government and the principal Medical Officer of Health for the Transvaal. We have pointed out how serious the position would be if an outbreak of typhus occurred on the Witwatersrand, the difficulty of the position lying not so much in the handling of the natives on the mines, but in preventing the spread of the disease should it occur amongst Europeans or natives in other quarters. We are ready to carry out any reasonable measure to prevent its introduction into the Witwatersrand area, and have notified the Government of this fact; indeed, so far as the industry is concerned, we at once adopted certain cleansing methods which should be very efficacious. The main difficulty, however, as I have just stated, will be the combating of the spread of the disease should it break out in the slum quarters of the various municipalities. That is a matter that might be considered to be outside the province of the industry, but we immediately got into touch with the Johannesburg Municipality, our respective medical officers have conferred, and we have no doubt that the Municipality, after having obtained the necessary special temporary powers from the Government, will handle the matter thoroughly and effectively.

Industrial Matters.

Industrial matters connected with white employes have occupied a great deal of attention during the three months I am reviewing. The unions we met consisted of the S.A. Mine Workers' Union and the Mechanics' Unions, viz., the Amalgamated Society of Engineers, the Boilermakers' Society, and the Amalgamated Society of Carpenters and Joiners. I am happy to think that we were able to come to a satisfactory conclusion with all the men's representatives on all the important points, leaving a few smaller questions still under discussion. The first question, common to all, which occupied our attention was the necessity of meeting as effectively as possible the continuous increase in the cost of living. This we have done by putting into operation a war bonus in addition to that arranged in 1916, which you will remember provided a certain monthly sum for all married employes, irrespective of the size of their families. The additional bonus now granted differs from the former in that it is based on the principle of total dependents (wives and children only). The arrangement is that 10s. per such total dependent per month is paid to all employes earning up to, and including £30 per month, 7s. 6d. per such total dependent per month in the case of employes earning more than £30 and up to £32 10s. per month; and 5s. per such total dependent per month to employes earning more than £32 10s. and up to £35 per month. This method of discriminating in proportion to the the size of the family is, I think you will agree, a sound one. Any cases of hardship in connection with single men with dependents will be dealt with individually by the managements concerned. The bonus, of course, applies to all married employes earning the wages I have indicated, whatever may be their occupation, with the exception of the mechanics, with whom, as before, the war addition to wages has been distributed equally, at their desire, amongst married and single men in the manner set out in the report before us.

I think you will agree that the increased war bonus pretty effectively meets the increased cost of living that has recently taken place, but there is a very important aspect of the matter, on which I would touch for a moment. I have already referred to the very difficult situation of the mining industry, and particularly the lower grade section of it, in the increased burdens it has to bear, and therefore need not emphasise that side again. The point is, however, that it is a well-known fact that increases in the emoluments of large bodies of employes definitely assist in producing a further rise in the price of commodities, under the existing untrammelled operation of what is known as the law of supply and demand. The employes, having more to spend, create a larger demand and, with any restriction in supplies, prices increase. Thus we feel that this increased war bonus will, as I have just said, itself accelerate the tendency for the cost of living to increase still further. That the question is one of extreme seriousness is very strongly in evidence in other countries, where, as we have seen, the major portion of acute industrial unrest has its origin in this condition of affairs, added to the definite suspicion of the existence of profiteering. With us the "cost of living" problem is probably even more difficult because of the fact that the product of the industry in which we are concerned has a fixed selling price. Recognising the importance of the question, therefore, the Government, on the representation of this Chamber and of the Trades Unions, has appointed a small committee to go into the question of the increased cost of living without delay. I trust that valuable recommendations will be made by that committee, and quickly.

Terms of Agreement.

On the many other industrial matters that we have discussed and arranged with the representatives of the workmen, I need only speak in a very brief way, because the details have already appeared in the Press and are set out in the report in your hands. As regards the mechanics, we arranged that a 48-hour working week at the standard rate should come into force at once instead of, as previously arranged, coming into force three months after the declaration of peace. The two hours compulsory overtime per week that were to be worked until the last-mentioned date have accordingly been abolished. We agreed to an extension of the holiday leave privileges for these classes of workmen, and discussed at considerable length, and with appreciable benefit, the system regarding the training of apprentices that the Chamber evolved some little while ago. Finally, certain arrangements intended to remove frequent causes of friction on the mines as a result of the employment of handymen in skilled trades and the engagement of improvers complete a settlement which I sincerly trust will be effective for a considerable time to come. With the S.A. Mine Workers' Union an agreement has been come to in regard to minimum rates of pay of cetrain classes of underground employes and working hours. The minimum rates of pay which have been settled provide, inter alia, a minimum wage of 15s. per shift to all underground employes with fifteen months' experience, 16s. 8d. per shift to employes in certain occupations with fifteen months' experience, and 20s. per shift to employes in certain other occupations with two years' experience. The reduction in working hours from 48 hours at the face to 48½ hours bank to bank has also been agreed to. This laying down of minimum rates of pay below which no man who has the necessary experience shall be employed in the various occupations, and the acceptance of the bank to bank principle, are two very notable steps that we have taken as a result of the conferences with the representatives of our workmen. It is realised that the minimum rates of pay will certainly entail an appreciable increase in the wages bill of the mines, and it is also realised that our desire to institute a shorter Saturday shift, which is the real point aimed at in the shorter working week, will involve some mines in a certain amount of hardship and difficulty. Having done our level best to meet the desires of the men in these two respects we look to them to co-operate with us towards increased efficiency, in order that the present very serious situation in which a large section of the industry is placed shall be met and overcome.

The representatives of the men have agreed, and I think rightly so, that the Union will undertake that the question of hours will not be raised again until at least three months after the declaration of peace.

We have discussed also with the South African Engine Drivers' and Firemen's Association the question of standard rates of pay for stationary and locomotive engine-drivers and firemen. We have submitted to that Association a proposal for the establishment of minimum rates of pay for these men below which no person would be employed on day's pay. The proposed agreement in this case also, therefore, does not in any way interfere with the freedom of contract existing between mining companies and this class of employe; in other words, it would not restrict in any way a mining company employing a man at any higher rate than is prescribed, so long as it did not employ him at a rate below that prescribed. Negotiations are still proceeding.

The Executive Committee has been considering the question of the abolition of the seven day week for reduction employes, and while it has come to the conclusion that the change could not be made at the present time with advantage to the industry, owing to the abnormal conditions prevailing, yet it will be prepared to reconsider the whole question after the termination of the war, with a view to arranging for a six day week for reduction employes.

Boards of Reference.

That, gentlemen, completes a brief review of the industrial side of our work recently, and I would add finally that small standing joint boards of reference have been created for all sections of employes for the purpose of considering any grievances which prove incapable of adjustment between the mine managements and the men concerned. The object of these boards of reference is naturally to prevent disputes proceeding to undesirable length. Before I leave this subject may I urge very strongly upon the workmen of these fields that there should not be the slightest hesitation on their part in approaching their managers on the subject of any grievance. Our experience is that many small points come to the Chamber for settlement which, with my knowledge of the mine managers of these fields as a whole, I am perfectly convinced would be at once settled by them if the men would interview them. Similarly I would appeal to the managements of our mines, and perhaps particularly to the sub-officials, to continue to give evidence to the men with whom they are connected of their readiness to extend prompt and sympathetic consideration to any grievance put before them.

You will observe that the Ministry of Munitions has officially approved of the scheme for the pooling of mining supplies referred to at the quarterly meeting of the Chamber on June 20th, 1917. The arrangement applies to all gold, coal and diamond mines in the Transvaal, the importation of supplies for which will in future take place solely through the pool organisation which has been established and is conducted by the Chamber, with the advice of a Technical Advisory Committee, on which the Government are represented. All certificates for the importation of such supplies will be countersigned by a Government representative. The carrying out of the scheme is entailing an enormous amount of work in addition to the work ordinarily undertaken by the group buyers, but with the ready assistance of these gentlemen the organisation is working smoothly, and at the present moment nearly 200 articles have brought under control. As an example of the advantages of the pooling arrangement, I would mention that a few days ago we were able to cable to the Ministry of Munitions stating that until further notice no further permits need be issued for the export of certain sizes of wire ropes. This had been brought about by the reduction in the number of spare ropes that need be kept when the spares of all the mines are pooled as compared with the number that had to be kept in the past when each mine relied on its own stocks. The technical advisory committee has also taken in hand the very large and important question of the standardisation of engineering requirements, and it is hoped in the course of a few months to standardise a number of such articles.

In these times, when there is rightly much interest in the establishment of local industries, the shoes and dies experimental plant put up by the Chamber at the Witwatersrand Co-operative Smelting Works on the Robinson Mine, for the re-making of old shoes and dies is an object lesson of what can be done in making shift for ourselves in times of emergency. The plant is turning out shoes and dies at a cost which enables the company to sell to the mines at prices very much below the present imported price, and which will, I think, enable it to sell after the war at less than pre-war prices. This experiment has encouraged the Union Steel Corporation of South Africa to make arrangements to establish at the corporation's extensive works at Vereeniging electric furnaces capable of supplying the mines with a minimum of 300 tons of shoes and dies per month. I think, gentlemen, that the experience that has been gained at the shoes and dies plant, where the first electric furnace in South Africa was erected, is most valuable, and that we are greatly indebted to the gentlemen composing the committee of management in charge of the experiment. The by-products section of the Witwatersrand Co-operative Smelting Works, Ltd. (which company controls both plants) is also an instance of most excellent experimental work brought to a satisfactory conclusion and resulting in a large saving to the industry. I understand that methods adopted there have proved their value in the most conclusive manner, in having been adopted on a number of mines on the Reef.

Miners' Phthisis.

The dust conditions on the mines, as disclosed by the sampling of the mine air, carried out by the Chamber's dust sampling staff and by the mines themselves, show, if anything, a still further improvement. The purchase by the Chamber of the property known as the Wedge Farm situated near Frankenwald, for use as a Silicotic Sanatorium, will provide a very pleasant country residence for silicotic sufferers, where I sincerely hope they will rapidly regain health. The institution, receiving, as it will, sufferers from silicosis only, will not be so much in the nature of a hospital as the present Sanatorium; indeed, only very limited hospital accommodation is being arranged for. The residents will almost all be able to move about freely and indulge in recreation, and I anticipate that there will be a considerable demand for admission to the new institution, which will be opened towards the beginning of next year. The mining industry is providing the whole cost of the scheme.

Miners' Phthisis Acts Amendment Act.

The principal amendments in the law are set forth in your Executive Committee's report, and embody in the main the recommendations of the Select Committee, whose report had not been received at the date of our last meeting. I do not propose to deal in detail with the provisions of the new Act. I can only say they constitute a very severe increase in the amount of compensation to be awarded not only for future cases, but for cases thought to be finally adjudicated. The point I wish to make is that this measure, which so materially increases the calls on the miners' phthisis funds, is passed at the very end of the session, and the industry, which is to provide two-thirds of the money, has never been afforded an opportunity of being heard by the Select Committee. At the outset, when that Committee sat, the Chamber was informed through the Clerk of the House of Assembly that the Committee would be prepared to receive a statement on any point which it might was to bring to the Committee's notice. Subsequently the Chamber submitted a statement of its views, and the report of the Select Committee shows that by a majority it refused to receive it or evidence tendered verbally. The extraordinary injustice of the method adopted speaks for itself. The industry's efforts—attended, happily, with marked success—towards the elimination of this complaint, and its attitude on the subject of compensation, particularly that shown in the report of the Select Committee of the previous year, do not, I feel sure, merit the treatment accorded it. Moreover, apart from the question as it affects the industry, I do not think it is in the interests of the country that a measure of this importance should be adopted by Parliament in the last few days of the session. As you will see from the report, your Executive Committee has adopted certain recommendations with regard to the working conditions that should apply to apprentices returning from active service. For every two months of service an

apprentice will be credited with one month of his apprenticeship period; but in no case will the period of apprenticeship be reduced by more than one year. His pay, however, will increase yearly on a graduated scale, with a maximum of 15s. should the apprentice's period on active service require him to exceed the original period of five years in order to complete his term of indenture.

Your Executive Committee has further decided to provide facilities for a period of four years' apprenticeship of youths not over 20 years of age who by reason of their having proceeded on active service have become ineligible on account of age for the ordinary conditions of indenture. Since our last meeting, the Departmental Committee on Underground Mining Contracts has issued a unanimous report. I think the Committee is very much to be congratulated that its recommendations on this most difficult question are unanimous. The report is also noteworthy for its able historical review of the underground contract system. Its recommendations are being most carefully considered by a Committee of the Association of Mine Managers, and I understand these recommendations are also being considered by a Committee representing the South African Mine Workers' Union. At a later date it is proposed to hold a further meeting with the representatives of the Union, and I sincerely hope that as a result of this report and the forms of contract will be devised which will prove far more satisfactory and less conducive to irritation than the rather complicated systems which have hitherto been in existence. You will see from the report the main provisions of the Income Tax (Consolidation) Act affecting companies. The Income Tax Act for individuals is, of course, of comparatively recent creation, whereas under the various Profits Tax Acts the gold mining industry has been subject to what was in principle an income tax from very early days. It is too early to express any definite opinion as to the machinery of the Act in relation to companies hitherto coming under the Mining Taxation Act. In some respects the present Act is a considerable advance on the working provisions hitherto in existence. As you will see from the report, the allowance for the amortisation of capital expenditure for gold mining companies is preserved. This allowance, however, is only made before payment of the normal tax; in cases, however, where no normal tax is paid, owing to the profits being insufficient to exhaust that allowance, should a distribution of those profits be made to shareholders—which in effect is a return of a proportion of their capital—the dividend tax is required to be paid on the amount of the profits so distributed. I have to record, with deep regret, the death of Mr. R. M. Connolly, who was for a long time a member of this Chamber. I have also to record the death of Mr. Georges Rouliot with very much regret. He has not been here for many years, but those of you who were here at the time he worked for the industry realised the extraordinary ability which he showed, and I am sure you will wish to record with his relatives and friends our sincere regret.

Mr. W. T. Graham seconded the adoption of the report of the executive. He should like, he said, to have recorded an expression of their appreciation of the very arduous work of the President and other members of the executive during the last three months. That work had been carried through so successfully that it deserved a special vote of thanks.

The President: Thank you.

Far East Rand.

Mr. Dale Lace said he had listened with very much interest to the President's very able speech, but he regretted that he had not touched upon the point of the dying industry. The President pointed out some time ago that some 15 mines might have to close down—he (Mr. Lace) thought the number should be more—and he wanted to know the policy of the Chamber in building up a larger industry on the Far East Rand. The President and others gave evidence before the Select Committee two years ago, in which they advanced the claims of the industry to be allowed to live, and they could not be satisfied with a few mining areas being offered for bidding. He wanted an assurance that the matter had not been relegated to the dust heap.

The President: I can assure you that the Executive Committee of the Chamber is at one with you in realising the importance of the Far East Rand and the extreme desirability of extending the industry in that direction and opening up and testing as many areas as possible. At the last quarterly meeting you referred to the same subject and I replied then that we were in touch with the Government and had made representations. We have emphasised that with all the vigour that is in us. Since that date I understand it has been recognised by members of the Government that the Far East Rand Mining Leases Bill will come before the House in the next session and prior to the commencement of the next session the Chamber had in mind the desirability of approaching the Government and urging upon them the urgency of the matter. That Bill was drafted on the evidence that I gave as President of the Chamber.

Mr. Lace: I appreciate that.

The motion for the adoption of the report was then put and carried.

Those present were Messrs. G. Imroth, F. Raleigh, E. Evans, D. Christopherson, A. French, W. T. Graham, J. Andrew Cohen, E. Danckwerts, C. Meintjes, S. M. Nelson, V. J. Ronketti, S. C. Steil, T. G Suter, R. W. Townsend, A. A. Auret, B. T. Bourke, E. Brayshaw, J. A. Dennison, P. Dreyfus, A. G. Gill, A. Gregor, Max Honnet, J. Jourdan, J. Dale Lace, H. O. Mascall, A F. Mullins, E. H. Read, E. J. Renaud, P. Richardson, H. A. Rogers, D. W. Rossiter, E. G. Izod, D. Wilkinson, F. G. A. Roberts, W. Gemmill and E. L. Kelsey, joint secretaries.

NEW BOKSBURG GOLD MINES.

Presiding over the annual meeting of the New Boksburg Gold Mines, Limited, the chairman (Mr. Edw. H. Read) said:—The expenditure was £3,818, of which £2,451 was paid on account of claim licences. The amount received as interest, rents, and sundry revenue was £1,677, leaving a nett expenditure of £2,141. In addition, £968 has been realised by the sale of certain machinery. There is nothing further to report upon the subject of your company's prospects. The property remains in the hands of a caretaker. It is with great regret that I have to record the death of Mr. S. H. Farrar, a member of the London Committee. I now move the adoption of the report and account before you.

The report and balance sheet were adopted, and the retiring directors were re-elected.

TRANSVAAL G.M. ESTATES, LTD.

The 20th ordinary general meeting of shareholders in the Transvaal Gold Mining Estates, Ltd., was held in the board room, Corner House, on September 26.

Mr. H. C. Boyd presided, and among those present were Colonel Sir A. Woolls-Sampson, Dr. W. Squire, Messrs. W. A. Nellist, S. Zwarenstein, E. N. Hind, C. Meintjes, A. J. Wright, S. Evans, B. T. Bourke, J. E. Jones, M. Honnet, J. Spranger Harrison, and W. J. Gau

The Chairman's Speech.

The Chairman, in moving the adoption of the report and accounts, said: During the twelve months ended 31st March last, with which the report before you deals, 193,905 tons were crushed, the largest in the history of the company; but recovery being lower per ton and costs higher, the working profit was about 2s. 9d. per ton less. Of the net profit for the year of £138,677, taxes absorbed £20,428, debenture redemption £3,948, and the two dividends of 7½ per cent. and 5 per cent. respectively £75,528, leaving an appreciably increased balance of just over £124,000 to be carried forward. At the close of the year debentures to the value of £48,136 were outstanding. Since then purchases to the value of about £500 have been effected. Full details in regard to expenditure on capital account are given, there being a credit on balance of just over £1,700, mainly owing to the amount written off the value of the Central Mines development, the suspense account in connection with which stood at a very considerable sum. It may be mentioned that at the Central Mines the redemption charge is now 7s. per ton milled. The greatly increased amount of £21,148 was spent on prospecting, without any very definite results to report, except at Ponieskrantz North, where at the end of the year nearly 53,000 tons had been developed on the Portuguese Reef, having an average value of 9·3 dwts. As you are aware, this area is now regarded as a developing mine, and I am glad to say that the reserves have been appreciably added to this year. Though at times patchy, values there have of late been more consistent, and it appears that a valuable asset will be established. The mine will probably be connected to the Central Works by an aerial gear, but the details have yet to be fully thought out. Partly on account of considerable shortage in native labour, prospecting on the more outlying properties has to a great extent been stopped for the present, and work concentrated on the ground in the neighbourhood of the Central Mines. Any discoveries there have naturally a greater commercial value than those in more remote ground, where separate plant would be required, and there appears to be a considerable field for prospecting activity in the large area involved. Prospecting and development still continue at Olifantsgeraamte, but it does not seem likely that we can open sufficient payable ore to warrant our erecting a plant. After working for about a year and a half at a steady, if small, loss on the alluvial on Finsbury and Nooitgedacht, and having lately been able by the use of pumps to bottom a number of test holes, we were forced to the conclusion that the properties were not such as we could hope successfully to exploit, and all work there has recently been stopped. This is another instance of our being forced to agree to proclamation in spite of insufficient information as to likely payability. While not hopeful either of the values to be recovered in the Blyde River alluvial, it is felt but right to test it thoroughly, and this will be done on arrival of the plant now on order.

Improved Value.

Although a decrease in the reserves at the Central Mines has to be recorded, the total of 379,000 tons, with an improved average value at 9·9 dwts., is more satisfactory than could at one time have been expected, while both Elandsdrift and Vaalhoek show proportionately considerable increase in tonnage with but slight decrease in value. Details of the ore actually available for stoping at the Central Mines are given. The year's work in the various mines is fully described in the reports, and need not be summarised at this late date. There is still no improvement to the dip of Peach Tree and Duke's Hill South, in which one drive has been continued. Final exploratory work is at the moment proceeding at depth to ensure that no payable ore body has been missed, and if that gives negative results it is generally felt that we are no longer justified in continuing this expensive work, which has been steadily carried on without any encouragement for a number of years. Against this there appears to be good ground for hoping that in the older portions of these mines, and even in the Theta, ground hitherto regarded as unpromising will yet be proved to be payable. As in the case of what may be termed new prospecting work in the Central area, it is clear that a great deal of further exploratory work in some of the older mines will be justified. In Columbia Hill Shales development results are varying, but on the whole encouraging. Ore from this mine is now being sent to the mill by an aerial gear, which is working satisfactorily. In Brown's Hill development has been quite satisfactory, and the disclosure of further considerable tonnage of payable reef is looked for. So far as can be judged at this stage, the ore reserve at the Central Mines is being maintained.

The General Position.

We have had the advantage of the temporary services of Dr. E. T. Mellor, Consulting Geologist of the Rand Mines, Ltd., and as giving an interesting picture of the general mining position throughout our property we now submit his intentionally brief and non-technical report, written last month, after a second and extended visit to the district. Copies of the report are on the table, and will be issued to shareholders with the proceedings of this meeting. The prospects at Vaalhoek have lately appreciably improved through the discovery of Glynn's Reef overlying the existing workings in the River Section, payable values having been exposed at several points considerable distances apart. At Elandsdrift the dip section, or mine proper, where as you see at the end of last year over 55,000 tons of nearly 17 dwt. rock were exposed, continues to open up very satisfactorily, and at present in depth all faces are payable. Owing to the existence of a large amount of water, progress is difficult and a shaft has been started some 2,500 feet to the dip of the present workings, which should eventually drain them and permit of more rapid development. The difficulty in regard to the provision of the necessary power for pumps has been to some extent overcome, and if good values are encountered in this shaft the prospects of this already very promising area will be greatly improved. The "blow" continues to provide about half the monthly mill tonnage, with a value of 8 or 9 dwts. per ton—the remaining more valuable ore coming from the dip section—and should be able to maintain this supply for about two years more. Ahead of this ore body is possibly something in the neighbourhood of a quarter of a million tons of lower value. Owing to the coarseness of the gold, sampling is misleading, and a test is therefore being made of this ore by milling it alone with five light stamps recently erected. Should a value in the neighbourhood of 4½ dwts. be established for any considerable tonnage, the erection of further stamping power would be warranted.

Stripping and felling of trees in the wattle plantations is proceeding, and the bark is being chopped. Pending the arrival of a disintegrator, long since ordered in England, demand for our product is somewhat restricted, but there appears to be sufficient to keep things going adequately until we are in a position to supply the further prepared bark. Satisfactory arrangements have been made for the disposal of the timber felled in the process of stripping.

Profits and Dividends.

The profits for the five complete months of the current financial year have amounted to, roughly, £43,000. A severe storm in August somewhat reduced that month's profit and did serious damage to the mine timber plantation on Driekop, while this month's profit appears likely to be relatively low owing to the shortage of labour now being experienced. Allowance must be made for taxation, debenture redemption, increased amount invested in stores, and the small expenditure on capital account, and a dividend of 5 per cent. has accordingly been declared for the half-year. It is with deep regret that we have to record the death of Mr. J. H. Ryan, who had been a director of the company for many years. The board desires to place on record its appreciation of the services rendered by Mr. R. C. Warriner, our consulting engineer; Mr. Barry, our general manager; the managers at the various mines and the staff and employees generally. I now beg to move that the directors' report and the accounts for the year ended 31st March, 1917, be received and adopted.

The report and accounts were adopted.

The appointment of Sir Abe Bailey as a director in the place of the late Mr. Ryan was confirmed; and the retiring directors (Sir Bartle Frere and Sir Abe Bailey), and auditors (Messrs. Howard Pim and Hardy and Mr. Chas. Stuart) were re-elected.

AFRIKANDER PROPRIETARY

In moving the adoption of the report and balance-sheet at the meeting of the Afrikander Proprietary Gold Mines, Ltd., on September 26, the chairman, Mr. Edward H. Read, said:—Gentlemen,—Since our last meeting the company's cash became exhausted, and it was necessary to provide further funds for the maintenance of your property. Certain of the principal shareholders undertook, at the request of the board, to lend the company a sum of £4,000, which, it is estimated, will be sufficient to maintain the property until about March, 1919. The loan is secured by an irrevocable power of attorney to pass a mortgage bond over the assets of the company, and bears interest at the rate of 6 per cent. per annum. Of the total amount of the loan £2,000 was payable at once. At the 30th June a sum of £1,519 had been received on account of this instalment, and the balance has since been paid. The other half of the loan will be called up as required.

The nett expenditure for the year was £1,980, of which £1,363 was paid to the Government in respect of claim licences and mynpacht dues. The property is in the hands of a caretaker, and the machery and plant is in good order. I now move that the report and accounts before you be adopted.

The report and balance-sheet was adopted, and the retiring directors were re-elected.

KLEINFONTEIN ESTATE AND TOWNSHIP.

Mr. Edw. H. Read presided over the meeting of the Kleinfontein Estates and Townships, Ltd., on September 26, and in moving the adoption of the report and balance sheet said:—The year ended June 30 last has been a satisfactory one for your company. During that period agreements have been entered into with the Van Ryn Deep and the Government Areas for the supply of water to those companies, and the old agreement with the East Rand Proprietary Mines, which was due to expire at the beginning of this year, has been reviewed, and a new agreement entered into on similar lines.

At August 31 the total contents of the dams was 394,000,000 gallons, as compared with 527,000,000 gallons at the same date last year. The road over the bottom dam to connect the northern extension with the old township has now been completed, and the provision of this means of communication with the northern extension should result in an increased sale of stands in that part of the town. During the year the profit earned was £23,022. An amount of £508 was brought forward in the appropriation account from the previous year, giving a total of £23,530, which has been dealt with as follows: Government taxation, £3,205; depreciation of assets, £912; distributed to shareholders, £19,125; leaving a balance carried forward to the current year of £288.

Under the new Income Tax Act the accounts show a liability of some £1,200 for excess profits tax. The object of the provision in the Act regarding excess profits was to tax profits made owing to conditions brought about by the war. Your company's revenue has been increased, owing to natural conditions, and chiefly on account of the fact that there has been more water available for sale than in the period with which comparison had to be made in the assessment of the tax. The prices charged for water and for real estate have not been increased, and as it was clearly not the intention of the Legislature to impose a tax on a company such as this, whose profits have in no way been affected by war conditions, and whose sale prices remain at pre-war standard, the company's position has been put before the Commissioner for Inland Revenue, with a view to obtaining relief.

I now move the adoption of the report and accounts before you, and the confirmation of the action of the directors in declaring interim dividends Nos. 29, 30, 31 and 32, totalling 22½ per cent.

The report and balance sheet were adopted, and the retiring directors were re-elected.

RAND KLIP, LTD.

Mr. Edward H. Read presided over the meeting of the Rand Klip, Ltd., on September 26, and in moving the adoption of the report and balance sheet, said: The report of the directors and the statement of accounts for the year ended 30th June, 1917, are before you for your consideration. In terms of the resolution passed at the special general meeting held on 11th April last the whole of the company's property and assets are to be disposed of to the Modderfontein East, Limited, in exchange for 162,126 shares in that company, together with an option on 81,063 shares for three years from date of registration of the company at 21s. 3d. per share, and a further option on the same number of shares for four years from the same date at 22s. 6d. per share. The transfer is about to be effected and the shares and options will be received when it is complete.

You are doubtless aware that while the Imperial Treasury did not consider that its assent was required for the issue

of the working capital of the Modder East, which was provided from funds in South Africa yet the Lords Commissioners refused to grant sanction for any of the new shares or options to be quoted on any Stock Exchange in Great Britain. There is little doubt that this refusal will extend during the present war, and owing to this embargo upon transactions in Modder East shares your board considers it desirable in the interest of shareholders as a whole for this company to retain if possible the shares and options to be received until dealings are permitted in them on the London Stock Exchange. There is no such restriction placed upon dealing in Rand Klip shares, and your board, therefore, proposes to leave the question of the liquidation of the company and the distribution of the Modder East shares in abeyance for the time being.

The Modder East was registered on the 2nd July and from that date the duration of the options is calculated. Work was commenced on the property at once; we understand that two circular shafts have been started in the ground leased from the Government, which is that portion of the property adjoining the Modder B. Good values have been found by that company near its eastern boundary and there is reason to hope that similar values will also be found in the Government ground leased by the Modder East. It will be some time before the reef is struck in these shafts, but in the meantime we understand that the company is opening up the workings on the Cloverfield property to connect later on with those of the circular shafts.

Arrangements have been made whereby copies of all published reports of the Modder East will be circulated among the shareholders of the Rand Klip, and you will thus be kept fully advised from time to time of the progress of the new company.

I now move that the report of the directors and the statement of account before you be adopted.

The report and balance sheet were adopted and the retiring directors were re-elected and the auditors reappointed.

ANGLO-FRENCH COMPANY.

Presiding over the meeting of the Anglo-French Land Company of the Transvaal, Ltd., on September 26, the chairman, Mr. Edward H. Read, in moving the adoption of the report and balance-sheet, said:—The revenue of the company amounted to £947, as compared with £880 for the previous year. Working expenses were £627, showing a slight decrease. An amount of £87 was spent in well sinking on the farm "Eerste Geluk." The available cash at the end of the year was £14,680, the increase, compared with the previous year, being principally accounted for by the receipt of instalments on account of the sale of the surface rights of the farms "Uitduiker," No. 173, District Rustenburg; "Magalaquin," No. 171, District Waterberg; "Sterkstroom," No. 19, District Waterberg.

There has been a greater demand for farm properties during the last twelve months than was the case for several previous years. With regard to the possibilities of mining, no discoveries have been made in the vicinity of any of your properties which would justify expenditure upon exploratory work.

The directors are pursuing a policy whereby the surface rights of your farm properties are sold whenever reasonable offers are received. The mining rights, however, of all farms will be retained as an asset to the company. I now move the adoption of the report and accounts before you.

The report and balance-sheet was adopted, and the retiring directors were re-elected.

New Patents.

510. Jesse Ditson.—Improvements in and relating to drill sharpening machines.
511. John Allen Cowan.—Improvements in or relating to the means for feeding the films to the picture projecting mechanism of cinematograph and like machines.
363. Algernon Clement Fuller.—Improvements in telegraphy and apparatus therefor.
364. The Sopwith Aviation Co., Ltd., and Harry Alexis Kanper.—Improvements in and relating to means for synchronising the firing of a gun with the rotation of a propeller upon aeroplanes.
365. The Sopwith Aviation Co., Ltd., and Thomas Sopwith.—Improved device for the attachment of cables, wires and the like upon aircraft.
366. Herbert Henry Curnow.—Improved device for advertising and like purposes.
367. Gustav Honegger.—Improvements in packings for stuffing boxes or pistons.
368. Sten Rudberg.—Improvements in rock drilling apparatus.
369. Merrill Metallurgical Co.—Improvements in the precipitation of metals or materials from solutions.
370. Ernest Allan Reeves, Marcus Cohen and Myer Levy.—Mica lantern slide.
371. British United Shoe Machinery (South Africa), Ltd.—Improvements in sewing machines.
372. Norman Blythe Braly.—Improvements in hose coupling.
373. Norman Blythe Braly.—Improvements in hose coupling.
374. Carl Gustaf Soderluna.—Improvements in and relating to ball bearings.
375. Daniel Diver.—Improvements in cemalgamator and separator.

Victoria Falls Power Co.

The directors' report of the Victoria Falls Power Company shows that the net earnings last year were £800,000 (in round figures), being an increase of £70,000 on the previous year. A sum of £150,000 is placed to reserve, and dividends declared of 5 per cent. on the ordinary, and 10 per cent. on the preference shares, the sum of £72,000 being carried forward.

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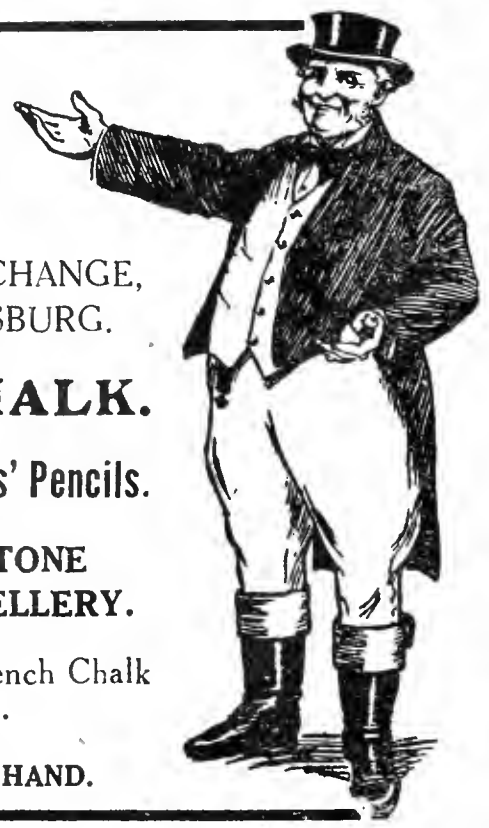

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DECLARATION OF DIVIDEND No. 23.

A DIVIDEND of 5 per cent. (1s. per share), free of South African Tax, has been declared by the Board for the period ending 30th September, 1917, payable to all Shareholders registered in the books of the Company at the close of business on 30th September, 1917, and to holders of Coupon No. 23, attached to Share Warrants.

The Transfer Books will be closed from the 1st to 8th October, 1917, both days inclusive.

It is intended to post the Warrants in payment of this Dividend on or about the 5th November, 1917, but irregularity in the Mail Service may render it necessary to defer the posting by one or even possibly two weeks. Those despatched from the London Office to persons resident in the United Kingdom will be subject to a deduction of English Income Tax.

Coupon No. 23, attached to Share Warrants, will be payable on or after 7th November, 1917, at the London Office of the Company. Coupons must be deposited Four Clear Days before being paid, and unless accompanied by Inland Revenue Declarations, they will be subject to a deduction of English Income Tax.

By Order of the Board,

Transvaal Consolidated Land and Exploration Co., Ltd., Secretaries.

Per C. L. READ.

Head Office: The Corner House,
Johannesburg, 26th September, 1917.

JOHANNESBURG

Consolidated Investment Company, LIMITED.

(Incorporated in the Transvaal.)

Notice of General Meeting of Shareholders

NOTICE IS HEREBY GIVEN that the Ordinary General Meeting of Shareholders in the above-named Company will be held in the Board Room of the Johannesburg Consolidated Investment Company, Limited, Consolidated Building, Fox Street, Johannesburg, **on Tuesday, the 27th November, 1917, at 11 o'clock in the forenoon,** for the purposes following:—

To receive and consider the Statement of Accounts and Balance Sheet for the period ending the 30th June, 1917, and the Report of the Directors and Auditors thereon.

To elect four Directors in place of those retiring, in terms of the Company's Articles of Association.

To elect Auditors, and to fix their remuneration for the past financial year, and to transact any other ordinary business of the Company.

By Order of the Board,

W. H. MARDALL, Secretary.

Johannesburg, 24th September, 1917.

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